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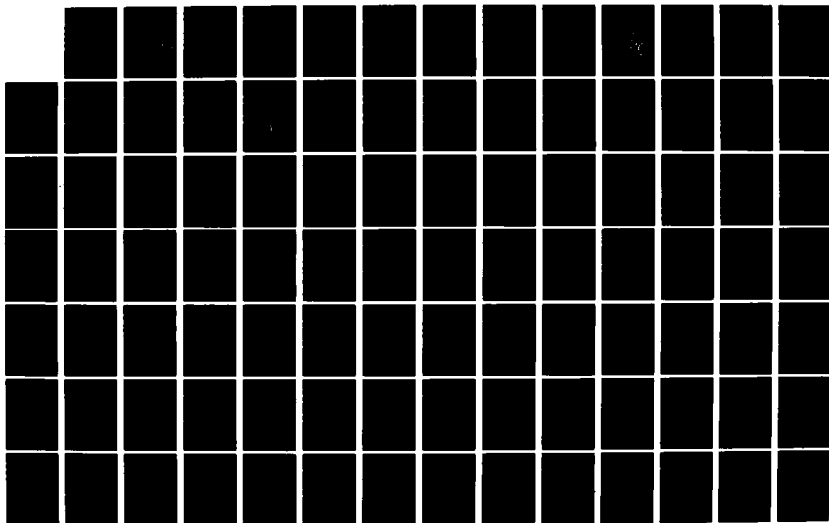
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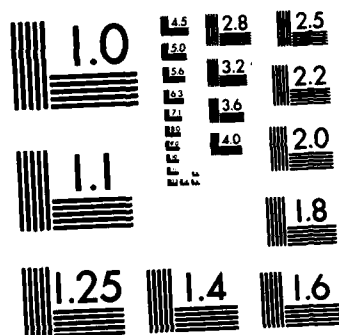
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ARCHAEOLOGICAL SURVEY
OF THE UPPER SALT CREEK BASIN,
OSAGE COUNTY, OKLAHOMA

FOSTER E. KIRBY

ANNE B. JUSTEN



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ELECTE
FEB 22 1983
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U.S. ARMY CORPS OF ENGINEERS,

TULSA DISTRICT

CONTRACT DACW-56-80-0075

PRINCIPAL INVESTIGATOR: K. C. REID

JANUARY 1983

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ABSTRACT

In August 1980, the University of Tulsa conducted an archaeological survey for the U.S. Army Corps of Engineers, Tulsa District, of the proposed Shidler Lake reservoir in upper Salt Creek valley, Osage County, Oklahoma. The principal investigator was Dr. Marvin Kay, then of the University of Tulsa, now of the University of Arkansas, and the field supervisor was Mr. Foster Kirby, then of the University of Tulsa, now of the Bureau of Surface Mining, U.S. Department of the Interior. Six persons spent a total of 90 man-days surveying an area of 4,010 acres. A total of 35 previously unrecorded sites ranging from historic Osage through Plains Woodland/Late Archaic were located, and nine previously reported sites were re-evaluated. In addition, 25 find spots and loci of potential paleoenvironmental interest were recorded. Five prehistoric sites were tested for buried deposits; of these, only one, 340S444, is considered eligible for nomination to the National Register of Historic Places.

INTRODUCTION

→ The Shidler Lake project is a U.S. Army Corps of Engineers dam and reservoir located in the north-central portion of northwestern Osage County, Oklahoma (Figure 1). The proposed Shidler Lake will be formed by a dam across Salt Creek, and the reservoir will inundate approximately 4,010 surface acres extending northward to just south of the Kansas-Oklahoma border. The Corps of Engineers, Tulsa District, contracted with the University of Tulsa to conduct the archaeological survey and assessment of the upper reaches of Salt Creek reported in this document.

The survey area included 4,010 acres that will be directly impacted by construction of the dam and reservoir. No provisions for surveying areas of indirect impact were included in the contract. Field work was conducted in August of 1980. A total of 90 man-days was expended leading to the discovery of 35 archaeological sites and the re-assessment of nine previously recorded sites. These include both historic and prehistoric occupations. In addition, a total of 25 artifactual find spots and isolated loci of ecological or paleoenvironmental significance were identified.

Five sites were subjected to limited testing, with laboratory analysis of recovered materials carried out at the University of Tulsa in the fall of 1980. —

ENVIRONMENTAL SETTING

The Salt Creek valley is located near the present boundary between the oak-hickory savannah to the east and the tallgrass prairie to the west. Today the climate is classified as moist and subhumid with about 34 inches of annual precipitation. The wettest month is May and the driest January, but as in most areas of North America these characteristics are subject to rather wide yearly fluctuations. Maximum mean summer temperature is 69° and for the winter is 25°.

This rather benign climatic regime supports a variety of plant species. The major plants of the prairie association are of the genera Agropyron, Andropogon, Bouteloua, and Sporobolus, as well as a variety of composites and legumes (Bruner 1931:110). The oak-hickory savannah is characterized by blackjack oak (Quercus marilandica) and post oak (Q. stellata), with smaller amounts of hickory (Carya). The understory vegetation can vary in thickness and consists of aster, big and little bluestem grasses, common yarrow, indigobush, ragweed, and virginia creeper. Such plants as ragweed become more abundant as grazing increases.

On the floodplain, ash, elm, and cottonwood dominate. The floodplain terraces in contrast to the floodplain itself and the uplands support a deciduous forest of hickory and oak. The distribution of these plant communities is related not only to the geomorphic setting but also to the attendant soil associations.

In general terms the western portion of Osage County is underlain by structures of shale, siltstone, and limestones of marine origin (Bellis and Rowland 1976). Salt Creek is the easternmost creek in this western third of the county. East of the Salt Creek basin are the more resistant

sandstones in place of the siltstone; the shales still occur but the marine limestones are of less depth when compared with the situation to the west. Cuesta ridges are characteristic of the topography in the eastern two-thirds of Osage County, which in turn effected differences in drainage patterns (Bellis and Rowland 1976).

The sandstone structure also affects soil types and formation. In general, the soils of the eastern area are sandier and thus seem to hold moisture to a greater degree than the limestone-siltstone-shale derived soils to the west. The topographic and geomorphic changes coincide with the change in the plant communities even though the climatic regime, particularly precipitation, does not change.

Topography and flora also have effects on the faunal communities of the two regions. The tallgrass prairie fauna is characterized by such small game animals as badger, coyote, skunk, and possibly bison. Birds of economic significance include bobwhite, dove, and prairie chicken. The oak-hickory savannah supported bobwhite, cottontail rabbit, squirrel, and white-tailed deer. In addition to many of the animals of the adjoining prairies and savannahs, the floodplain forests supported beaver, mink, muskrat, opossum, and pheasant (Duck and Fletcher 1945:26). The stream itself would have been a good source of various economically important fish, including several species of bass and catfish. Mussels are present today and are thought to have been available prehistorically (Vehik et al. 1979:8).

In addition to these biotic resources, the inhabitants of Salt Creek valley were situated close to important technological raw materials. Although Foraker chert is a rather poor-quality flint, it outcrops along

and is present in the gravels of Salt Creek. A better quality material, Neva chert, is available to the southwest of the Shidler Lake project. The best known source area is in northern Pawnee County across the Arkansas River (Greig 1959:95). This chert is not available within the project area. Another material present in Salt Creek collections is Kay County chert, quarried from sources in western Osage and eastern Kay counties. Boone and Peoria cherts derived from the Ozark upland in northeastern Oklahoma are also present in Salt Creek collections. The relative importance of each of these materials will be discussed more fully in the lithic technology section of this report.

Little has been determined concerning the paleoenvironmental setting of the study area. Until recently, most work was concentrated in the eastern portions of Osage County, where the geomorphic and pedological situations are somewhat different from those in Salt Creek valley (Artz, this volume).

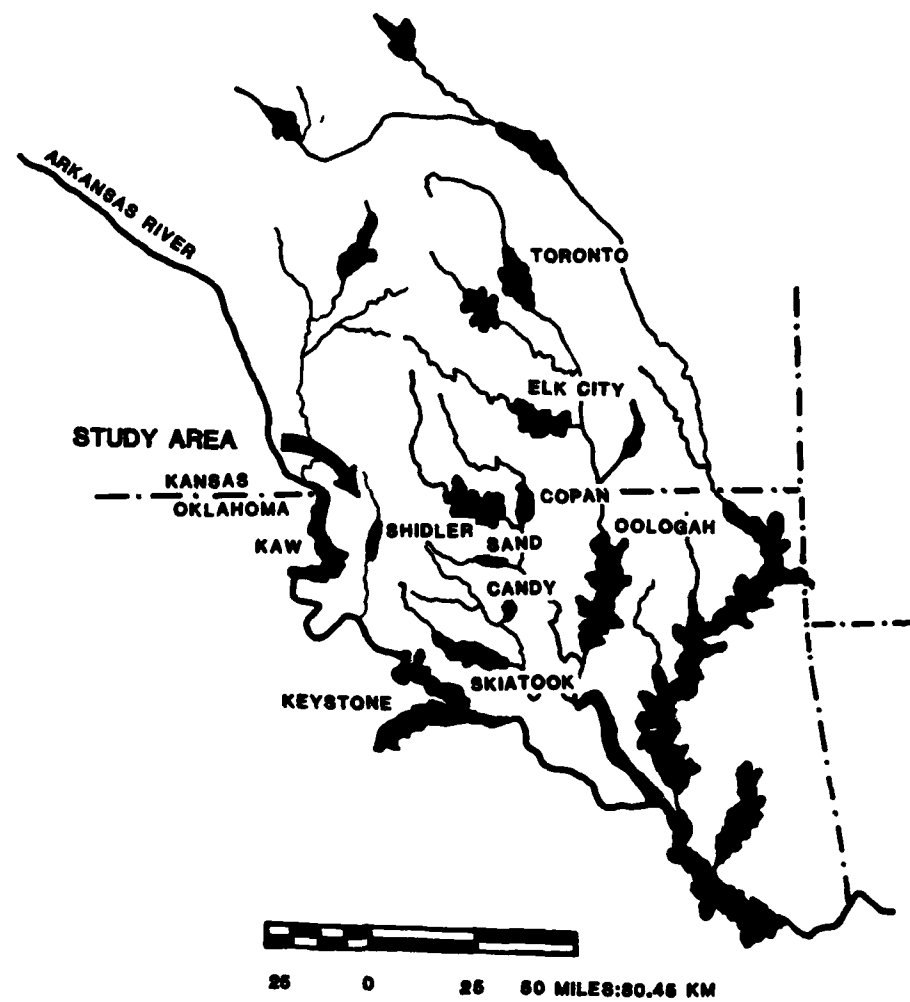


Figure 1.
Location of study area.

ARCHAEOLOGICAL BACKGROUND

Previous work.

Within the larger region of the Shidler Lake project area, considerable reservoir-oriented archaeological work has been carried out. Little of this work, however, has been concentrated in the Salt Creek basin. A short survey conducted by Neal in 1973 provides the first glimpse of the archaeology of the project area. He found nine prehistoric sites and one historic grave (Neal 1973:24). The prehistoric sites were categorized as habitation sites, workshop sites, and habitation/workshop sites, found in four topographic settings, and all suggested to be of Late Archaic or Early Woodland age.

Ongoing work by the University of Oklahoma has focused on Salt Creek valley to the south of the project area. This work was begun in the summer of 1978 and the first report of investigations was published the following year (Vehik et al. 1979). Additional fieldwork done in 1979 and 1980 has not yet been published. These investigations began with a walk-over survey of the lower and middle portions of the basin, although grab-sample surface collections as well as limited testing of two sites was carried out. One of the major objectives of this series of investigations was to model the relationship between climatic and cultural change over time in the prairie-forest ecotone (Vehik et al. 1979:1,178).

More intensive work has centered on Kaw Lake reservoir located on the Arkansas River west of Shidler Lake (Wyckoff 1965; Bastian 1969; Rohrbaugh 1973, 1974; Hartley 1974, 1975; Hartley and Miller 1977; Young 1978). Here a number of sites have been extensively investigated with the goal of

refining the cultural-historical sequence of this portion of the southern plains.

East of the Shidler Lake project area, various investigators have concentrated their efforts in the Verdigris River basin in the eastern Cross Timbers. These projects began in the mid-1960s and have been largely reservoir-oriented. They include surveys and excavations in Toronto Reservoir (Howard 1964), Elk City Reservoir (Marshall 1972), Copan Reservoir (Rohn and Smith 1972, Vaughn 1975, Henry 1977c, Keyser and Farley 1979, Vehik and Pailes 1979, Prewitt 1980, Kay 1981), Birch Lake (Barr 1974, Perino 1972, Henry 1977a), Oologah Reservoir (Prewitt 1968), Skiatook Reservoir (Rohrbaugh and Wyckoff 1969, Perino 1972, Gettys et al. 1976, Henry 1977b, 1979), and the Sand Creek Impoundment (Bobalik 1976). To the south of these projects but still east of Shidler Lake, work has been done at Keystone Lake (Bell 1952a, 1952b, Moore 1980).

Despite the number of projects in the region, many have been surveys which usually do not yield assemblages suitable for intersite and intrasite analyses. With the exception of sites located in Copan Reservoir (Keyser and Farley 1979, Prewitt 1980, Kay 1981), this holds true for the more intense investigations. However, the radiocarbon sequence is improving and during the past decade a more refined culture-historical perspective has been developed for northeastern Oklahoma.

Paleoindian.

The earliest occupation of the project area was probably during the Paleoindian period, dating prior to 6000 B.C. Isolated surface finds comprise the earliest data base for this period in the region (Wyckoff 1965, Bell 1971).

Archaic.

The Archaic period extends from the end of the Paleoindian period to about A.D. 1 in the project area. Several sites in Kaw Lake reservoir have been excavated that are attributed to this period (Bastian 1969, Rohrbaugh 1974). However, radiometric dates are available only from the Lawrence site on the lower Verdigris River, and these date the latter part of the Archaic period, from ca. 1500 to 800 B.C. (Baldwin 1969). These Archaic occupations have been linked to the Grove Focus centered in the Ozark upland to the east.

The Kaw Lake components yielding Archaic materials do not resemble those of the Grove Focus (Rohrbaugh 1974:160). Calf Creek points collected by local landowners in the Copan Lake area provide limited evidence of Archaic occupancy in the Cross Timbers (Rohn and Smith 1972:39), and Middle and Late Archaic affiliations have been suggested for nine components along lower Salt Creek (Buehler and Vehik 1978:3).

Archaic assemblages are characterized by a lack of ceramics and by the presence of large contracting and expanding stemmed projectile points, as well as by various heavy-duty bifaces and grinding tools. There is some indication, especially among assemblages of the Grove Focus, that the economy was based on diversified but intensive hunting and gathering with increasing reliance on local materials and increasing permanence of habitation.

Plains Woodland.

Following the Archaic period was the Plains Woodland period, extending from about A.D. 1-900. Components dating to this period are common at Kaw Lake and probably for the region as a whole. However, the various attempts to refine the Woodland sequence into phases have not met with agreement

among investigators working in the region. However, some trends are apparent in the adaptive strategies of the inhabitants as evidenced by changes in material culture. For example, stemmed dart points continue through the first portion of the Plains Woodland period and are replaced by small corner notched stone points in the latter part. These changes are linked to the spread of bow-and-arrow technology. Pottery is introduced to the region sometime during this period, with cord-marked and sand-tempered wares common in the latter half. The lack of temporally diagnostic artifacts to distinguish the Plains Woodland period from the subsequent Plains Village period continues to hamper efforts to delineate pressing questions of subsistence and community patterning (Vehik et al. 1979:12-14).

Plains Village.

Although some tool types, particularly pottery wares and small projectile points, are common to both the Plains Woodland and Plains Village periods, making the transitional sites difficult to isolate, there are some striking characteristics that distinguish components of the two periods. The most important of these may have been the Plains Village adoption of floodplain horticulture based on gardening of corn, beans, and squash. Hunting, fishing, and wild plant collecting apparently continued as economic supplements.

The adoption of horticulture influenced community patterns, and it is within the Plains Village tradition that hamlets of three to ten house structures become established (Wedel 1961:95). Associated with these small villages or hamlets were straight-sided and bell-shaped storage pits. Typical Plains Village artifacts include bison-scapula hoes, small triangular arrow points, and shell-tempered pottery.

Historic Period.

Something of a gap exists in the record of the transition of the late Protohistoric to early Historic times. At Kaw Reservoir four sites are attributed to the Wichita who abandoned the area about 1750 (Sudbury 1976: 11-13). The Osage had moved into the area by the early 1800s including portions of southern Kansas (Chapman 1959; Sudbury 1976:15; Wedel 1959:42). Meanwhile the Cherokee who had been removed from their original lands in the east were being displaced from eastern Oklahoma by white pressure, and the Osage were to move to eastern Kansas under the terms of an 1825 agreement. Three years later another treaty was arranged to set up the Cherokee Outlet which was to provide an area of movement for the Cherokee to move even further west; this encompassed most of present-day Osage County (Gibson 1956: 79-80).

By the end of the 1860s as the western movement of people displaced by the Civil War was well underway, white settlers began to encroach on the territory occupied by the Osage in Kansas. An agreement in 1870 established the Osage Reservation which corresponds largely to Osage County in a portion of the former Cherokee Outlet. The land was to be exclusively for Osage use and all whites were to be removed. The Osage settled and resumed more traditional ways of life and land utilization. Government-built houses were supposed to encourage the Osage to use the land more intensively, but instead white sharecroppers were encouraged in adaptation to the desires of the government (Bailey 1970:142-45).

Early in the next decade, large-scale leases were arranged with cattlemen who wanted a place to fatten their animals before they were shipped on to the slaughter houses in Kansas City and Chicago (Burrill 1972:535-39). Burrill (1972) reports that about half of these leases were made to Osage

mixed-bloods or to whites who became Osage by marriage. These leases may be the beginning of an abuse of the system in which whites married Osage to benefit from programs arranged by the government and which continued into the 1920s when the area was important for another resource, oil (Garrick Bailey, personal communication). The first big leases included the upper portion of Salt Creek where the present project is centered.

By the early 1900s the number of "pure" Osage was less than the number of mixed-bloods. Consequently, due to pressure for land the Osage Allotment Act was passed in 1906. Under the terms of this agreement, each Osage family was to have an 160-acre homestead, then each individual was to receive another two 160-acre allotments as well as other tracts totaling 176.5 acres (Bailey 1970:27,165). Since few of these allotments were contiguous pieces of land, many were sold or leased to white ranchers and farmers (Holcomb 1940:3).

Ranching activities and farming were the mainstay of the economy of western Osage County until 1920 when the Burbank Field was opened in the Salt Creek basin. Many of the other fields in Osage County declined, but Burbank Field and the town of Shidler continue.

RESOURCE MANAGEMENT

Introduction.

A total of 44 cultural resource sites and 25 isolated occurrences of cultural or paleoenvironmental interest have been recorded within the boundaries of the proposed Shidler Lake project area. Nine of the sites were located during an initial reconnaissance survey in 1973 (Neal 1973), with the remaining 35 sites recorded by the University of Tulsa during the summer of 1980. Only one of these sites, 340S444, warrants consideration for inclusion in the National Register of Historic Places.

This section of the monograph will present the results of the University of Tulsa survey as well as comments on the re-visitation of six of the sites originally reported by Neal. For reasons of confidentiality specific site locations and other site information (land ownership, directions to the site, maps, etc.), may be found in Appendix II, composed of site forms submitted under separate cover. Artifact descriptions and counts are presented in the text descriptions in this section, together with summary information on each site and find spot. All sites have been labeled sequentially with University of Tulsa survey field numbers, followed by trinomial site designations issued by the office of the state archaeologist.

Methodology.

Two separate inventories of archaeological resources in the project area have been conducted, the first in 1975, the second reported here. The initial survey was not as systematic as the TU survey, which includes an

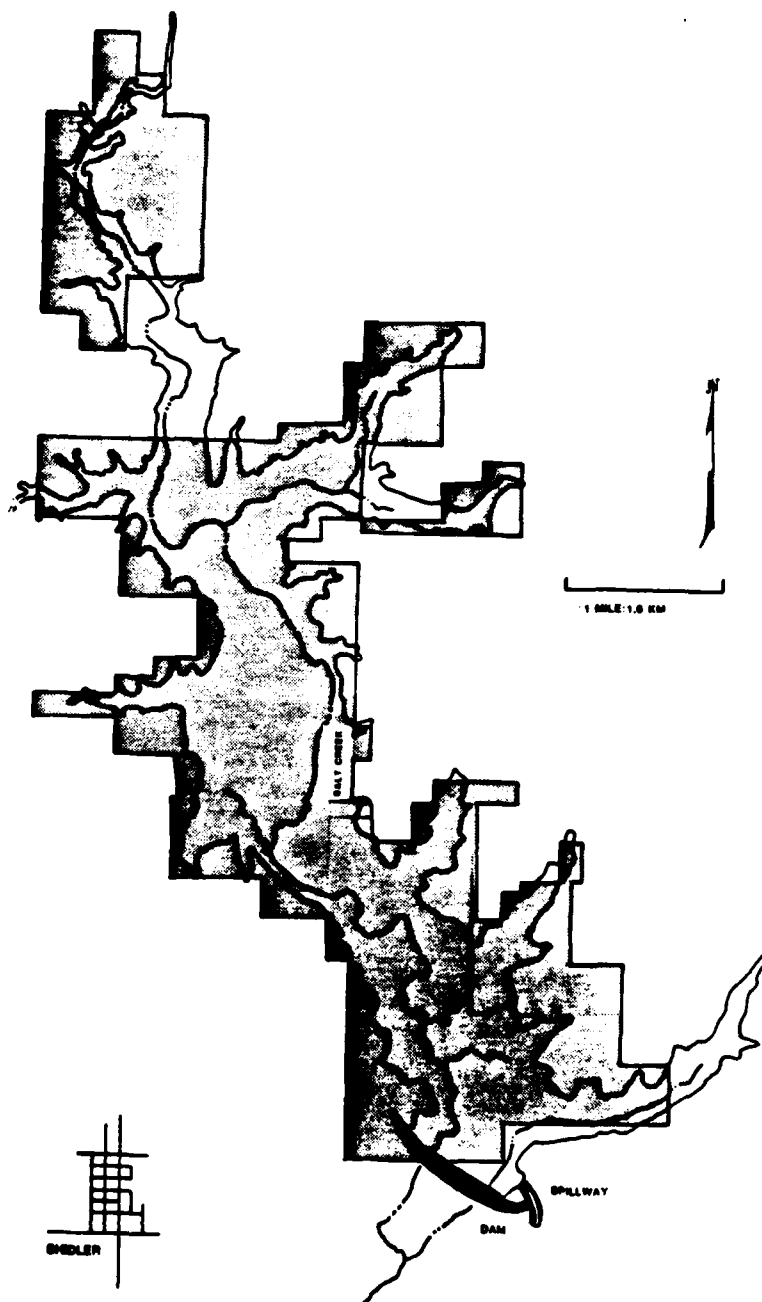


Figure 2.

Area surveyed in 1980 season.

inventory of all of those lands within the proposed lake boundaries. The floodplain elevation of 6,666 feet msl was utilized as the outer boundary. Several parcels of land, approximately 666 acres, were not surveyed since entry permission was denied.

The field survey was conducted during a three-week period in August by a crew averaging six individuals in size. After contacting various landowners (previous rights-of-entry permits had been obtained by the Corps) and setting up tentative times that we would be on their land, the survey commenced.

Survey transects within manageable areas of land were oriented with regard to topographic boundaries (Salt Creek, Elm Creek, and upland ridges and gullies) within the mapped reservoir boundaries. When the exact edge of the map boundary was in doubt, land was covered beyond the questioned boundary. The transects were walked with two to seven persons spacing themselves approximately 30-50 m apart, depending on the nature of the terrain. All of the surface was covered with gullies, trails, stream banks, rock outcrops, and other exposures receiving greater attention. The visibility of the surface ranged from good in road cuts, stream banks, and plowed fields to poor in heavily grassed ungrazed areas. Even in the heavily grassed areas, generally some exposures allowed for better visibility. The only areas not intensively surveyed were some of the heavily vegetated thickets along Salt Creek. Steep upland slopes and rock faces were examined for cultural remains.

When cultural remains were located, a more intensive inspection of the area resulted. If only one or two artifacts were located, the find was designated as an isolated occurrence. Only minimal information was collected for isolated finds (Appendix II). If more than two artifacts or a feature

(house foundation, hearth, etc.) were found, the area was designated as an archaeological site and recorded on State of Oklahoma site information forms. All visible artifacts were collected from the sites. If warranted, minimal excavation was conducted to obtain information for National Register evaluation. The original site forms, maps, notes, and artifacts are curated at the Laboratory of Archaeology at the University of Tulsa.

A classification of the chipped stone artifacts and the raw materials from which they were made that constitute the bulk of the recovered cultural remains is presented below.

Chipped stone artifacts.

For the nontool elements, a very simple classification scheme was employed. Based on their attributes, nontool elements were divided into primary, secondary, tertiary (interior), bifacial thinning elements, nondiagnostic shatter, or cores. Primary elements are those elements which display an obverse surface covered entirely by cortex. Secondary elements are those which display an obverse surface partially covered by cortex. Tertiary elements are those which display no cortex on the obverse surface. Bifacial thinning elements are those which display faceted striking platforms, acute angles at the intersection of the platform and the inverse face, and lipped bulbs of percussion. Nondiagnostic shatter are those elements of amorphous shape which cannot be put in any of the other categories. Cores are those raw material pieces which display a striking platform adjacent to a face from which one or more flakes have been removed.

The tools have been divided into groups based on broad similarities in morphology. Brief definitions of the groups are presented below, but type definitions are not presented here since a fuller description is available elsewhere (Henry and Kirby 1980). Descriptions of a type nature

are presented in this monograph as necessary in the cultural materials discussion of each site.

The classification scheme includes thirteen groups:

Scrapers are tools which exhibit semi-abrupt, often overlapping, and often lamellar retouch which creates a convex working bit. Usually these tools are unifacial and consist of endscraper and sidescraper subgroups. As is suggested by their names, endscrapers have a working edge transverse to the longitudinal axis, while sidescrapers exhibit a working edge parallel to the longitudinal axis of the blank.

Denticulates feature a series of concavities along the margin(s) formed by heavy and often abrupt retouch. The concavities each feature multiple flake scars.

Notches are similar to denticulates in that retouched concavities exhibit multiple flake scars. Single or discontinuous multiple retouched concavities on the edge of a piece distinguish notches.

Burins are produced by the removal of one or more flakes to form a chisel like edge roughly perpendicular to the inverse surface.

Perforators exhibit thick pointed projections at the intersection of two retouched edges or a retouched and a natural edge.

Drills are tools which have been retouched to form a narrow elongated bit, usually diamond-shaped in cross section, on a much wider base, usually lenticular in shape.

Knives exhibit acute, overlapping retouch on more than one-third of the margins of the tool. The shallow flake scars of the retouch may cover a quarter of the surface of the piece, and the margins generally are straight to convex.

Retouched pieces exhibit retouch confined to the margins of the tool.

The retouch is regular in pattern, that is similar in depth, dimension, and orientation, and may be normal, abrupt, or fine. The pattern of retouch results in an edge that usually is convex or straight, and usually this retouch is confined to one surface.

Bifaces are marked by extensive retouch on both faces of the artifact. Marginal retouch may be normal, abrupt, or fine, body retouch generally is shallow although the size of the flake scars may vary widely. Most pieces are lenticular in cross section, and most pieces are marked by symmetry.

Dart points and arrow points are those chipped stone tools thought of as having been hafted to shafts. Basal modification is the major distinguishing characteristic of both groups of pointed tools. Basal modification scheme dart points generally are heavier, thicker, and larger than arrow points.

Bifacially worked pieces which due to incompleteness or morphology that could not be classified as dart points, arrow points, or bifaces were classed as point/bifaces. Thus, guesses as to the other categories did not have to be made, and their integrity is preserved.

Varia includes those chipped stone artifacts which are irregular in morphology or which fit more than one other category (such as notch-perforator).

Aside from chipped stone tools assignable to the above categories, one potsherd and some groundstone tools were found. These are described individually in the site descriptions.

Chipped stone raw materials.

As noted earlier in the monograph, various chert varieties were available to the prehistoric inhabitants of the upper Salt Creek basin. The major varieties recovered in the material culture samples of this survey are Foraker and Kay County although several pieces believed to be from

areas east to the Ozark uplift and one specimen reminiscent of Alibates flint from the Texas panhandle also were found.

Foraker chert outcrops in the project area. It is blue-gray in color and contains numerous fusuline and crinoid fragments which detract from its potential for predictable knapping. Heat-treating improves its knapping qualities and imparts a pinkish color, but identification remains relatively easy. Banks (n.d.) indicates that weathered Foraker chert is tan to ashy gray in color. During this survey, however, nodules of Foraker chert were pulled from stream beds. Some of these nodules appeared to have the characteristic color and texture of heat-treating although there is no reason to believe that they were. This leads to the question of whether weathering in this variety might mimic heat-treating characteristics and cause some confusion in discussions of cultural patterns.

Kay County chert outcrops a short distance to the west and north of the project area. It is characterized by darker bands in a matrix which may be yellow, gray, or blue-gray in color. It, too, contains fossil inclusions; but the knapping qualities of this variety seem to be superior to those of Foraker chert. When heat-treated, the color changes to pink or red.

Significance.

Legal significance has its basis in a body of regulations including those pertaining to eligibility for nomination to the National Register of Historic Places and those pertaining to compliance with the Historic Preservation Act (1966), Executive Order 11593, the National Environmental Policy Act (1969), and the Archaeological and Historic Preservation Act (1974). These regulations present criteria which are the basis for historic and scientific significance. The legal criteria are quite broad and can be distilled to mean districts, sites, buildings, structures, and objects of State or local importance possessing integrity of location, design, setting, material, workmanship, feeling, or association. As well these legal entities should be (1) associated with events that have a significant contribution to broad historical patterns or (2) associated with the lives of significant individuals in the nations' past or (3) examples of distinctive characteristics of a type, period, or method of construction or representative of a significant and distinguishable entity whose components may lack individual distinction or (4) likely to yield or yielding of information important to prehistory or history.

These criteria have been interpreted by Scovill, Gordon, and Anderson (1977:56) to be applicable to an understanding of the range of activities of past individuals, both historic and prehistoric, rather than entities in themselves. In their view historical significance pertains to cultural resources which have potential for the identification and reconstruction of cultures or time periods or categories of human behavior.

While the above considerations are true, it is the relative significance of a site in relation to others in the region that must form the basis for management strategies. This whole problem, however, can be

sidestepped neatly if the strategy outlined by Lipe and Dixon (1977) is followed. This strategy calls for the preservation of a representative sample of sites and the collection of a representative sample of detailed data through mitigation of another subsample of sites in the relevant region. The data collected is done in light of uncertainty as to what will be pertinent to the research goals and designs of future archaeologists. Thus, all data and the contextual relationships which now are known to be important must be preserved.

Timely and specific research questions should provide the criteria for the evaluation of scientific significance according to Schiffer and House (1977:249). Thus, significance can be applied to sites which are useful for such specialized topics as technology although they may not have particularly new contributions to special or temporal questions.

Other researchers feel that not only are there no universally applicable criteria for evaluating site significance but also that such attempts are inappropriate (Grady 1980). While the ideal situation may be a development of a detailed set of criteria for a specific time period in a specific region, this cannot be done for the upper Salt Creek basin. As discussed earlier in this report, the region as a whole suffers from the lack of a chronological framework, comparative data on a number of issues including paleoenvironmental considerations, and knowledge of the relationship of surface data to subsurface context. Additionally, when survey data for a region is not augmented with excavation data, as is the situation facing researchers in the Salt Creek basin, only very general characteristics can be used for significance determination.

Recommendations.

At this point in the investigation of the cultural resources in the upper Salt Creek basin, a very simple dichotomy has been devised as pertains to the recommendations for a site or find. This dichotomy is based on an assessment of eligibility of a site or find to the National Register of Historic Places.

"No further work" is applicable to the entities the research value of which is deemed to have been confined to their recording and description. A major consideration is the context of the entity. Those in secondary deposit generally fall into this category. Those with little apparent integrity also are placed here. Isolated finds due to their nature almost always are placed in this category.

All other sites are considered to be "eligible for nomination to the National Register of Historic Places" with the implication that further work is necessary. In a survey situation with very limited testing, a conservative approach is appropriate. Through the further steps of testing and mitigation, it is expected that some of these sites will be shifted to another category of recommendations; the prediction of subsurface integrity based on surface evidence remains a tenuous and perplexing course.

Justification for the inclusion of sites as "eligible for nomination to the National Register of Historic Places" is based on the assessment of a particular site in light of the criteria of legal and scientific significance as discussed above. Specific characteristics of each site are presented in the site description section below, and summarized in Table 1.

Research Topics.

Six basic research areas are pertinent to the final assessment of legal and scientific significance. Survey data must be augmented with testing data and ultimately mitigation data for a final evaluation of the significance of both prehistoric and historic sites. The pertinent topics include:

- the establishment of an occupational chronology within the project area and the comparison of it to the regional chronology,

- reconstruction of the paleoenvironments for the various periods of occupation,

- establishment of the season or seasons of site utilization,

- definition of the principal activities carried out within the various occupations of the sites,

- examination of the adaptive strategies employed by the inhabitants of the Salt Creek basin, and

- the integration of the local chronology, environmental reconstruction, seasonality of occupation, site activities, and adaptive strategies with other archaeological data relating to the general region.

Chronology.

A temporal framework and refinement of the regional chronology is the basis of future study in the Salt Creek basin. A variety of dating methods are available for this research goal. Radiometric dating is needed to augment typological dating methods; soil and pollen studies may support future efforts on this topic.

Paleoenvironmental Reconstruction.

A primary source of environmental reconstruction data in northeastern Oklahoma is prehistoric pollen with support for these data achieved through sediment studies. Other areas of possible study are vertebrate and micro-vertebrate fauna and floral components. Environmental reconstruction is

necessary for a fuller understanding of site utilization and adaptive strategies.

Seasonality.

The analysis of fauna is likely to yield data on the seasonality of site occupations. The traditional methods of migratory waterfowl and hibernation studies often yield pertinent data. Site characteristics such as exposure and setting may influence seasonality of site occupation.

Site Function.

Intrasite and intersite patterns can be used to determine the range of aboriginal activity in a region. Lithic assemblages and their comparison have provided the traditional data for such studies in this portion of the continent. Artifact densities, tool-to-nontool ratios, and the configuration of the tool assemblages have been used successfully in site variability studies.

Resource Exploitation and Adaptive Strategies.

Resource procurement patterns can be determined for any number of classes of resources. For the Salt Creek basin, plant and animal exploitation are important particularly as they may relate to environmental reconstruction and adaptive modes (i.e., hunting, gathering, horticulture, etc.). The dynamics of chert procurement also is of great interest to researchers in the area especially as it relates to the relationships between prehistoric groups.

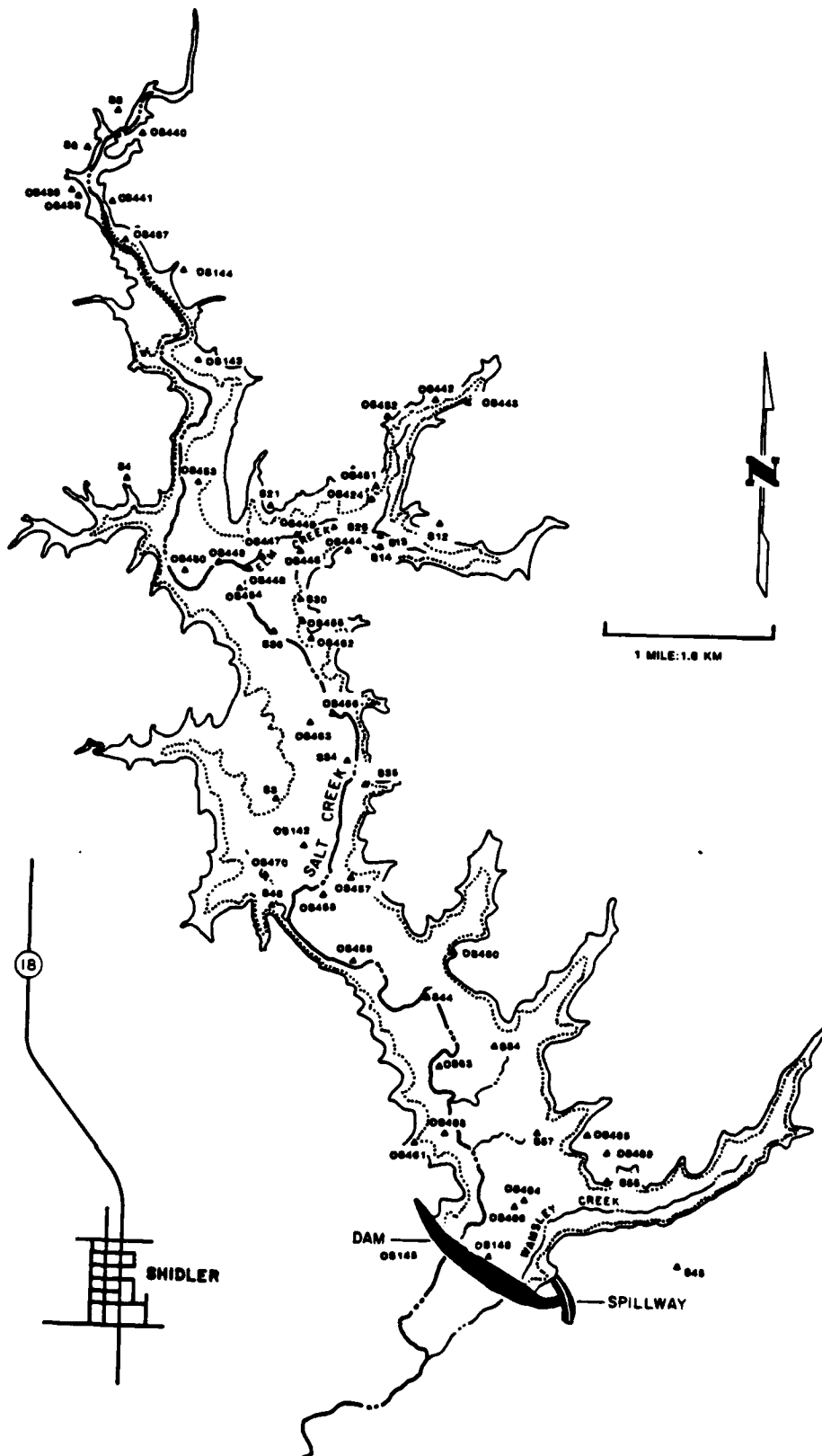


Figure 3

Location of sites (OS prefix) and find spots (S prefix) in Shidler Lake project area.

SITE DESCRIPTIONS

Site/Find Number

Shidler 1, 340S438

Site Type

Prehistoric Rockshelter

Description and Setting

The site is a small north-south oriented rock-shelter situated in the western upland limestone scarp immediately adjacent to Salt Creek. The height of the shelter is 1.4 m at the drip-line with a maximum floor width of almost 3 m. The total length of the shelter is approximately 11 m. In front of the shelter is a steep-faced talus slope that drops 5 m to a narrow terrace 6 m wide. This terrace is 3.5 m above the present stream channel. The slopes are heavily vegetated with a variety of oaks dominating. The uplands above and to the west of the shelter support a grassland environment with scattered trees.

On the surface of the shelter deposit were scattered chert flakes and mussel shell fragments. Additionally, numerous roof spall pieces littered the floor. The talus unit excavations were curtailed due to large spall pieces which could not be removed or worked around. There is no evidence of disturbance within the shelter although rodent and burrowing animal activity should be expected.

On the basis of the floor scattering of artifacts, the type of site, and its apparent cultural integrity, a 50 cm wide trench extending from the back wall of the shelter eastward to the talus slope was excavated to test the shelter deposits. The trench was 4 m in length and was excavated in 1 m blocks in arbitrary 10 cm levels to bedrock. The first three units of the trench are within the shelter behind the dripline, and the fourth unit is in the edge of the talus outside the dripline. The depth to bedrock averaged 20 cm inside the shelter while outside on the talus bedrock was not reached at 40 centimeters.

Cultural Materials

Surface: A simple endscraper made on a tertiary element of a white chert (Peoria?), a single notch made on a secondary element of nonheat-treated Kay County Chert, and a retouched piece made on a tertiary element of heat-treated Kay County chert comprise the tool sample coll-

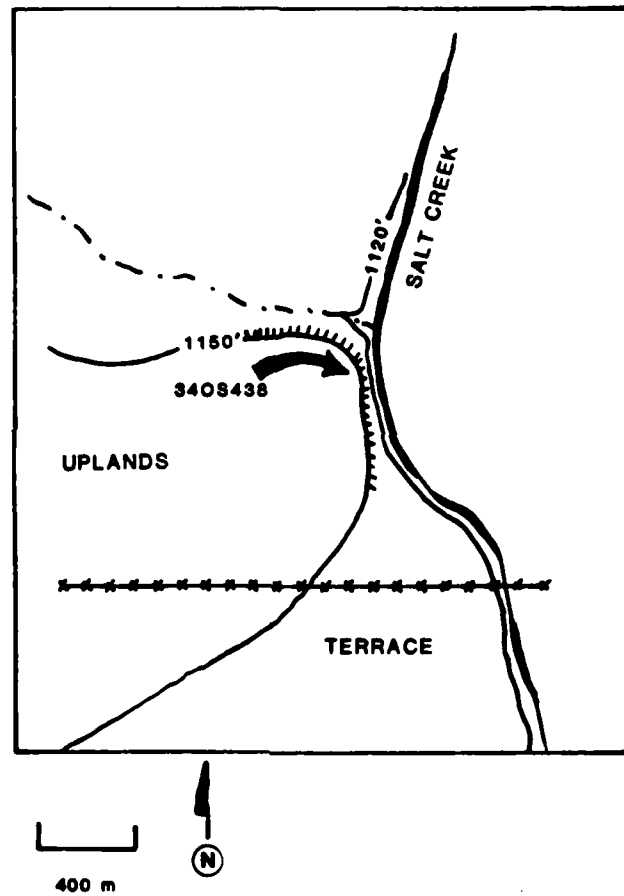


Figure 4
Location of rockshelter, 340S438, in scarp
overlooking Salt Creek.

ected. Of the secondary elements 2 are of heat-treated Kay County chert and 4 are of the same nonheat-treated material. Of the tertiary pieces 20 are of heat-treated Kay County chert and 4 are of nonheat-treated Foraker chert. In addition to the lithic remains, 2 pieces of long bone and numerous shell fragments were noted.

Unit 1--Surface to Bedrock: A side-notched, triangular bladed arrow point similar to a Washita point was recovered. Nine tertiary elements, 7 of heat-treated Kay County chert, 1 of nonheat-treated Kay County chert, and 1 of nonheat-treated Foraker chert, plus a core of nonheat-treated Kay County chert comprise the lithic nontool sample. In addition 3 bone fragments, 2 turtle shells, and more mussel shell fragments were recovered.

Unit 2--Surface to Bedrock: Nine tertiary elements, 6 of heat-treated Kay County chert and 3 of nonheat-treated Foraker chert, as well as mussel shell fragments were recovered.

Unit 3--Surface to Bedrock: One secondary element of heat-treated Kay County chert plus 9 tertiary elements were recovered. Of the interior elements, 4 are of heat-treated Kay County chert, 3 are of nonheat-treated Kay County chert, 1 is of Foraker chert, and 1 is of an unknown chert variety. Five small bone fragments also were recovered.

Unit 4--Surface to Bedrock in Front of Dripline: No lithic tools were recovered from this part of the trench. Of the secondary elements recovered, 2 are of heat-treated Kay County chert, 1 is of nonheat-treated Kay County chert, and 1 is of nonheat-treated Foraker chert. Of the tertiary elements, 41 are of heat-treated Kay County chert, 15 are of nonheat-treated Kay County chert, and 2 are of nonheat-treated Foraker chert. A large piece of nonheat-treated Kay County chert appears to be a core.

Pottery was recovered from this unit. A large sherd is a plain ware fragment exhibiting shell or bone temper, a hard compacted matrix, and both interior and exterior smoothing. It is 7 mm in thickness. Four other sherds of a different type also were found. These are highly

eroded making further identification impossible.

Also recovered from this unit are 9 turtle carapace fragments; 22 bone fragments, some of which are charred; and considerable numbers of mussel shell fragments.

Site Function

This may be a residential encampment of short duration.

Considerations and Recommendations

Although this is the only rock shelter located during the 1980 survey of upper Salt Creek basin, the cultural deposits are extremely shallow and promise relatively little time depth. The site is not considered eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shilder 2, 340S439

Site Type

Prehistoric Lithic Scatter

Description and Setting

A large lithic scatter is situated on the bed-rock uplands overlooking Salt Creek. The site is on the western side of Salt Creek immediately above Shidler 1, the rockshelter. The scatter extends for 200 m on its north-south axis and 25 m east-west, but no concentrations of materials are evident. There is no depth to the site. Sparse vegetation, scattered grass and some trees, mark the area. The elevation is 1150 feet.

Cultural Materials

Two tools were recovered. A broken biface (thickness 20mm) made on heat-treated Foraker chert was found. Also found was a simple side and endscraper made on nonheat-treated Kay County chert. Its dimensions are length 40 mm, width 35 mm, and thickness 11 mm.

Of the nontool elements, 41 are tertiary elements of heat-treated Kay County chert, 3 are tertiary elements of nonheat-treated Kay County chert, 2 are tertiary elements of heat-treated Foraker chert, and 3 are secondary elements of heat-treated Kay County chert.

**Considerations and
Recommendations**

The lack of archaeological context and the absence of diagnostic artifacts lead to the recommendation that this site not be considered for additional work. This site is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 5, 340S440

Site Type

Historic Homestead/Prehistoric

Description and Setting

This site is situated on a low upland knoll which projects slightly onto the Salt Creek floodplain. It is about 400 feet west of the creek and just north of the ranch road. The elevation of the area is 1150 feet. Several deep erosional gullies run off the site towards the southeast. The historic homestead is characterized by a house foundation, a cellar, a scatter of broken glass, and a barrel; nothing is diagnostic. Several trees are on the site which is surrounded by open pasture. The prehistoric evidence consists of one heat-treated Kay County chert flake found on the surface.

Cultural Materials

Other than the architectural features, the barrel and several pieces of glass were found but not collected. The single secondary flake is of heat-treated Kay County chert.

Site Function

This is a recent historic homestead.

**Considerations and
Recommendations**

The house has been torn down or moved. Other than obtaining ownership records from the county seat, no further work is required. Since the house has been destroyed and is of recent vintage, this site is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 7, 340S441

Site Type

Prehistoric Lithic Scatter

Description and Setting

This site is located on the east bank of Salt Creek almost directly across from Sites 1 and

2. The site is situated on a bedrock terrace at an elevation of 1130 feet, and the area of the site is approximately 200 m². Presently trees are growing along the stream bank, but to the west the terrace is open and surrounded by pasture. The cultural materials are eroding from shallow deposits of less than 20 cm depth. Most of the cultural materials appear to be resting on bedrock. Several shovel tests back from the edge of the stream indicated the shallow depth of the deposit and that the site deposits are confined to the near edges of the bedrock terrace. Salt Creek may have changed its channel just to the west of the site, and the presence of the bedrock terrace preserved the site.

Cultural Materials

Five tools and 39 nontool elements were recovered from the surface and the limited shovel tests. The tools consist of 2 retouched pieces, both made on tertiary elements of heat-treated Kay County chert; 2 notches, both made on tertiary elements of Kay County chert, one heat-treated; and 1 small piece of sandstone with evidence of grinding on one surface. Of the nontool elements, 5 are secondary elements (3 heat-treated Kay County, 2 heat-treated Foraker cherts), 27 are tertiary (17 heat-treated and 9 nonheat-treated Kay County, 1 heat-treated Foraker chert), 1 bifacial thinning element (heat-treated Kay County chert), and 6 nondiagnostic shatter elements (all heat-treated Kay County chert).

Site Function

This site appears to have functioned as a limited activity site which was utilized for only a short period.

Considerations and Recommendations

Due to limited nature of the artifactual deposit both culturally and stratigraphically, no further work is necessary at the site. The site is not considered eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 10, 34QS442

Site Type

Small Lithic Scatter

Description and Setting

This site is situated on the northern side of Elm Creek just north of the junction of Elm

and Dugout Creeks. The site is on the first terrace edge of an old meander scar some 75 m from the present stream channel at an elevation of 1120 feet. Several pieces of chert were found in an eroded area at the terrace edge of about 25 m². Materials appeared to be from just below the surface. The vegetation of the area adjacent to the site is open pasture to the north and tree bottomlands in the meander scar and south to the creek. Considerable erosion is evident along the terrace, possibly caused by water and the cattle which graze in the area.

Cultural Materials

Five pieces of Foraker chert were collected from this site, but some are of questionable origin. All of the pieces appear to have the characteristics of heat-treating; however, the question arises as to whether prolonged exposure to the atmosphere will produce similar surface effects. Four pieces appear to be secondary elements, but they have patinalike surfaces which make the distinction between patina and cortex difficult. The fifth piece is an interior flake. Several pieces show areas of retouch, but the origin of most of the retouch is questionable. It is likely that the elements were produced culturally and most of the retouch is a result of cattle walking on them.

Considerations and Recommendations

The questionable nature and the scarcity of the materials on this site indicate that no further work is required. This site is not eligible for nomination to the National Register of Historic Places. The material remains, however, raise an important question in regard to the identification of heat-treating on certain chert varieties and whether heat-treated characteristics may be obtained from prolonged atmospheric exposure.

Site/Find Number

Shidler 11, 340S443

Site Type

Small Lithic Scatter/Lithic Procurement Area

Description and Setting

This site is situated on the south bank of Elm Creek north of its junction with Dugout Creek at an elevation of 1120 feet. Numerous large pieces of Foraker chert are found in the creek deposits at this location. Several large non-

heat-treated flakes of Foraker chert were found in a washed out area near the stream bank. No pieces were found in context in the bank exposure. The length of flake distribution along the bank is about 5 meters. Several shovel cuts into the bank revealed no additional cultural material. The site is on the edge of an open field.

Cultural Materials

Four large primary flakes were noted scattered at the foot of the Elm Creek bank. The pieces appear possibly to have been from different cores based on differences in the visual characteristics of the rock. Perhaps the "knapper" was testing the quality of the available Foraker cobbles, and these primary flakes are all that remain of the test.

Considerations and Recommendations

No further work is recommended due to the paucity of the remains and the lack of good cultural context. This site is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 17, 340S444, field-numbered in localities 15, 16, and 17

Site Type

Multicomponent? Campsite

Description and Setting

Three major site areas, which are combined into a single site, were located on a flat terrace on the southern side of Elm Creek. The junction of Elm and Dugout Creeks is upstream from the site. The terrace where the site is situated is a fairly broad flat area between the creek and steep upland slopes. Presently the site is covered in forest with large interspersed open areas. The site is on an area 300 m long and 15 m wide. An erosional gully forms the eastern boundary of the site. A large lithic scatter-quarry is on the hill behind the site to the south; Foraker chert was almost exclusively found there. Large numbers of tools and lithic debris litter the surface of the campsite. A single test unit 1 x 1 m in size was excavated to 40 cm in depth using arbitrary 10 cm levels. All levels contained lithic artifacts, burned and unburned bone, and smatterings of charcoal. The upper two levels, however, contained a greater density

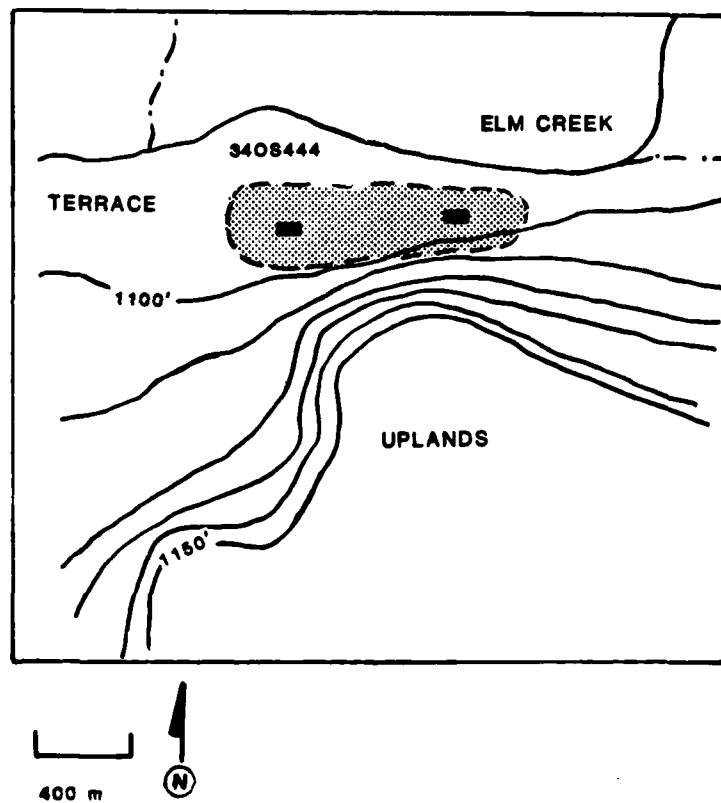


Figure 5

Location of 340S444, showing position of 1980 test units.

Cultural Materials

of materials than the lower two.

Surface: From locality 15, one tool, a simple sidescraper made on a heat-treated tertiary element of Kay County chert and 6 nontool elements were collected. These are comprised of 1 primary element of nonheat-treated Kay County chert, 1 secondary of heat-treated Kay County chert, 1 secondary element of nonheat-treated Kay County chert, 1 secondary of nonheat-treated Foraker chert, and 2 tertiary elements of heat-treated Kay County chert.

From locality 16, 3 tools and 2 nontool elements were collected. A complete unifacial knife was fabricated on a tertiary element of heat-treated Kay County chert. Its measurements are length 75 mm, width 30 mm, and thickness 8 mm. A broken unifacial knife also of heat-treated Kay County chert measures 31 mm in width and 7 mm in thickness. As well, 1 retouched piece made on nonheat-treated Foraker chert was collected. The retouch is confined to the inverse face. One nonheat-treated tertiary element of Kay County chert and one tertiary element of a black chert from eastern Oklahoma were recovered.

From locality 17, 2 large broken bifaces of heat-treated Kay County chert and one interior element of nonheat-treated Kay County chert were collected. The bifaces measure 61 and 97 mm in length, 78 and 95 in width, and 13 and 18 mm in thickness.

When the area was revisited and it was determined that a single site was involved, little attempt to maintain collection in localities was made. From the site as a whole, the following artifacts were collected from the surface. A double beveled pointed knife had been fashioned on heat-treated Kay County chert. It is complete and measures 98 mm in length, 47 mm in width, and 9 mm in thickness. A broken double beveled knife of heat-treated Kay County chert also was collected. Its width is 31 mm and its thickness 9 mm. A biface which may be a point preform measures 56 mm in length, 27 mm in width, and 6 mm in thickness. It was made on Foraker chert. A large biface/bifacial chopping tool also was collected. It measures 146 mm in length, 77 mm in width, and 27 mm in thickness.

One primary element of nonheat-treated Foraker chert was collected. Of the secondary elements collected, 3 are of heat-treated Kay County chert, 4 are of nonheat-treated Kay County chert, and 2 are of nonheat-treated Foraker chert. Of the tertiary elements, 20 are of heat-treated Kay County chert and 7 are of nonheat-treated Kay County chert. Nine cores were recovered: 1 multidirectional core of nonheat-treated Kay County chert, 1 multidirectional core of nonheat-treated Foraker chert, 2 bidirectional cores of nonheat-treated Foraker chert, 3 cores nonheat-treated Kay County chert. The latter 2 cores were used to produce blades.

Test Unit: From the first level, 0-20 cm below surface, 4 tertiary elements of heat-treated Kay County chert, 1 tertiary element of nonheat-treated Kay County chert, and 1 tertiary element of heat-treated Foraker chert comprise the lithics recovered. Numerous pieces of bone, some charcoal, and very fragmentary shell also were found.

From the second level, 20-40 cm below surface, 2 tertiary elements of heat-treated Kay County chert and numerous pieces of bone and some charcoal were recovered.

Site Function

This site functioned as a habitation site.

Considerations and Recommendations

Due to the presence of subsurface material and the richness of the artifact array as well as potential destruction if the dam is built, this site should be mitigated. This site is eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 19, 340S445

Site Type

Multicomponent Campsite

Description and Setting

This site is located on the northern side of Elm Creek upstream from Salt Creek. The site is situated on a triangular piece of land between an erosional gully on the west and the creek. The site appears to extend on the eastern side of the gully as well. Elm Creek and

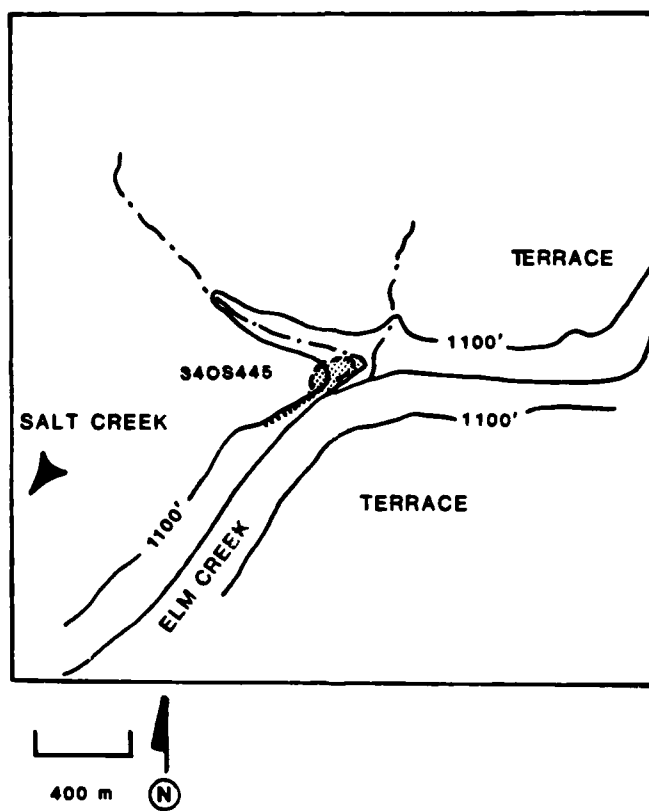


Figure 6

Location of 340S445 on erosional peninsula
of Elm Creek.

the gully are eroding the side. Some trees grow along the gully, but open pasture is inland from the creek. The elevation of the site is 1090-1110 feet. Site 20 is across the creek.

An exposure 2 m in height revealed several cultural levels marked by the presence of artifacts, fire-broken rock, and shell. One cultural level has bone eroding from it. A considerable number of artifacts were collected from the base of the exposure. The site area is 200 m².

Cultural Materials

A simple sidescraper on a secondary flake of a chert similar to Alibates flint was collected. Several bifaces and biface fragments were collected. All the bifaces are broken. One is of nonheat-treated Foraker chert and measures 33 mm in width and 10 mm in thickness. The other two are of nonheat-treated Kay County chert and measure 38 and 46 mm in width and 8 and 14 mm in thickness. The fragments include a distal half of heat-treated Kay County chert measuring 31 mm in width and 6 mm in thickness, a medial section of heat-treated Kay County chert measuring 5 mm in thickness, and a lateral fragment of an unknown type of dark gray chert measuring 8 mm in thickness. Other tools collected were a retouched piece made on a tertiary element of heat-treated Kay County chert exhibiting retouch on both the obverse and inverse surface, a multiple notch made on a tertiary element of nonheat-treated Foraker chert, a single notch on a secondary element of nonheat-treated Kay County chert, and a corner notched projectile point of heat-treated Kay County chert. The point is broken laterally, and the tip may be resharpened. Its measurements are 27 mm length, 4 mm thickness, and 16 mm base width.

One primary element, 9 secondary elements, 26 tertiary elements, and 1 core comprise the nontool element sample. The primary element is of nonheat-treated Kay County chert. Of the secondary elements, 7 are of heat-treated Kay County chert and 2 are of nonheat-treated Foraker chert. Of the tertiary elements, 16 are of heat-treated and 8 are of nonheat-treated Kay County chert and the other 2 are of nonheat-treated Foraker chert. The core is a

	fragment of a multidirectional core of Foraker chert.
	Other materials include numerous mussel shell pieces, a <u>Bison?</u> tibia, and a <u>Bos</u> tooth.
Site Function	This appears to be a multicomponent habitation site.
Considerations and Recommendations	This site has been badly disturbed by erosion and slumping and has little contextual integrity. This site is not considered eligible for the National Register of Historic Places.
Site/Find Number	Shidler 20, 340S446
Site Type	Prehistoric Lithic Scatter
Description and Setting	This site is on the southern side of Elm Creek east of its junction with Salt Creek. The elevation is 1080 feet. Materials were first located at the bottom of a large erosional gully on the first major terrace above the creek. Other materials were located on the surface in cattle paths. The site area is 400 m ² , and the site is situated in an open pasture with trees growing along the creek. The site is across Elm Creek from Site 19. Several 50 x 50 cm test units were excavated on the site, but no subsurface materials were found. No fire-broken rock, bone, or charcoal are exposed in the gully.
Cultural Materials	A broken biface of heat-treated Kay County chert is the only tool recovered. Two secondary elements of nonheat-treated Foraker chert and three secondary elements of nonheat-treated Kay County chert were found. Of the tertiary elements, 49 are of heat-treated Kay County chert, 11 are of nonheat-treated Kay County chert, and 7 are of nonheat-treated Foraker chert. Also, a multidirectional core of heat-treated Kay County chert and a single platform "blade" core also of heat-treated Kay County chert were collected.
Considerations and Recommendations	No further work is needed at this site due to the lack of subsurface remains and diagnostic artifacts. The site is not eligible

for nomination to the National Register of Historic Places.

Site/Find Number	Shidler 22, 340S447
Site Type	Small Prehistoric Lithic Scatter
Description and Setting	This site is situated on the northern side of Elm Creek upstream from its junction with Salt Creek. It is on the first major terrace above the creek at an elevation of 1100 feet that 5 pieces of chipped stone were found scattered in a cattle path. The site has an area of about 50 m ² and is confined to the area near the terrace edge. All materials were found on the surface, and an examination of the terrace cut bank revealed no other artifacts. Surrounding the site is open pasture. Site 23 is 100-200 m to the west.
Cultural Materials	All the pieces recovered are nontool elements. One interior element is of nonheat-treated Foraker chert. The other pieces are of Kay County chert: 1 nonheat-treated secondary element plus 1 nonheat-treated and 2 heat-treated tertiary elements.
Considerations and Recommendations	Due to the paucity of remains which exhibit no depth, no further work is suggested for this site. It is not eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 23, 340S448
Site Type	Large Lithic Scatter/Campsite?
Description and Setting	This site is located near the junction of Elm and Salt Creeks on the northern side of Elm Creek. It is situated on the first major terrace at an elevation of 1100 feet. Cultural materials were found scattered along a bedrock terrace bench. The site boundaries run some 50 m along the bedrock edge and at least 10 m back from it. Several 50 x 50 cm shovel tests perpendicular to the edge revealed a shallow sediment (30 cm); cultural materials were found primarily at the bedrock contact. Also

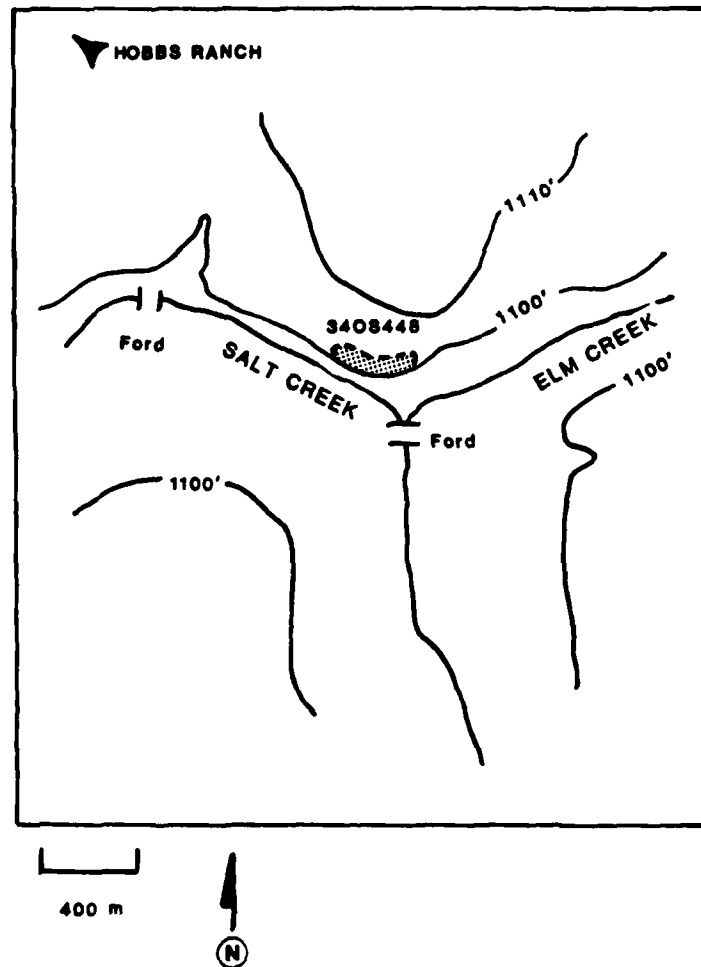


Figure 7

Location of 340S448 at junction of Salt and Elm creeks.

on the surface were several pieces of fire-broken rock and some sandstone fragments. This site appears to be a single component, likely of a late timeframe. Evidence of wind erosion is present.

Cultural Materials

Six tools were collected at the site. All are of heat-treated Kay County chert. One simple sidescraper, a fragment of the midsection of a bifacially worked tool, and 4 retouched pieces with retouch confined to one lateral edge comprise the tools. Seventy-two nontool elements were collected: 1 nonheat-treated and 10 heat-treated secondary elements of Kay County chert, 4 nonheat-treated and 54 heat-treated tertiary elements of Kay County chert, and 1 nonheat-treated and 2 heat-treated tertiary elements of Foraker chert.

Site Function

This site probably functioned as an activity area of short duration.

Considerations and Recommendations

This site has been severely disturbed by stream erosion and bank slumping. Despite the presence of some in situ materials, it is not considered eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 24, 340S449

Site Type

Small Lithic Scatter

Description and Setting

A small lithic scatter is located at an elevation of 1090 feet on the first major terrace on the western side of Salt Creek. An area of erosion is adjacent to the terrace edge. Based on the good bank and road exposure in the adjacent area, it is concluded that the scatter is confined to the surface. The site area is 300 m², but part of the site was destroyed by the bulldozing of a ranch road leading to the stream ford. The site is situated in an open pasture with some tree and brush cover along the creek. This site is across the creek and west of Site 23.

Cultural Materials

One lithic tool and 12 nontool elements comprise the material culture sample collected at this site. The tool is made on a nonheat-treated secondary flake of Foraker chert. Multiple notches form a serrated or denticulated edge on this piece. Its length is 42 mm, its width 46 mm, and its thickness 13 mm. Seven nontool elements are of heat-treated Kay County chert: 6 tertiary and 1 secondary element. Three tertiary elements are of heat-treated Foraker chert, and 2 tertiary elements are of nonheat-treated Foraker chert.

Considerations and Recommendations

Due to the paucity of the cultural remains and the surfacial and disturbed nature of the site, no further work is recommended. This site is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 25, 340S450

Site Type

Prehistoric

Description and Setting

This site is located on the southern side of Salt Creek west of the junction of Elm and Salt Creeks. Materials were found at the base of a steep erosion cut 4 m in height. No materials were found in situ, nor is there any indication of a buried soil. The materials were found on both sides of a stock pond-dammed gully and 25 m along the creek. Steep slopes just to the north of the site have deflected the creek away from the site. Near the site the vegetation is characterized by open grassland pasture.

Cultural Materials

One biface? fragment of a gray banded chert of unknown origin and 8 nontool elements were collected at this locality. Three non-heat-treated secondary elements of Foraker chert and 5 heat-treated tertiary pieces of Kay County chert comprise this sample.

Considerations and Recommendations

No in situ deposits were located. The site should be revisited to determine whether any in situ buried materials are exposed at a later time. At this time the site is not eligible for nomination to the National Register of Historic Places.

Site/Find Number	Shidler 27, 340S451
Site Type	Prehistoric Lithic Scatter
Description and Setting	Cultural materials were found on the surface in an open pasture blow out and sheet erosion area on the western side of Elm Creek just north of its junction with Dugout Creek. The site is bounded on the south by an erosional gully, and materials are scattered over an area measuring 25 by 50 m. The locality is 200 m from the creek at an elevation of 1110-1120 feet. Numerous nodules of Foraker chert were found in the gully bed, but no concentration of worked materials was evident. Sediments on the uneroded portions of the site are 20-50 cm in depth.
Cultural Material	Only one tool, a single notch on a heat-treated tertiary element of Foraker chert, was found. Nontool elements were fairly numerous: 1 non-heat-treated and 2 heat-treated secondary elements of Kay County chert plus 6 nonheat-treated and 17 heat-treated Kay County chert and 3 nonheat-treated Foraker chert tertiary elements.
Site Function	This site functioned as a limited activity site.
Considerations and Recommendations	The site at this time is not eligible for nomination to the National Register of Historic Places. The site should be revisited to see whether any concentrations of artifacts or typeable artifacts are recoverable. Then the eligibility of the site should be reassessed.
Site/Find Number	Shidler 28, 340S452
Site Type	Historic Trash Dump
Description and Setting	This locality is a flat area with scattered historic trash found in a small ravine. The trash consists of broken glass, rusted metal, and fragments of a crock. Around the site is open pasture, and several trees grow on the site. It is situated on an upland terrace at an elevation of 1130 feet. The locality is 250 m west of Elm Creek.

Cultural Materials	In addition to the broken glass shards and rusted metal, a broken crock with a partial inscription reading "The Buckeye..." was found.
Considerations and Recommendations	This recent historic trash scatter is judged to have little importance for producing information important to the history of the area. The amount of trash suggests a very limited utilization. This site is not eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 29, 340S453
Site Type	Small Prehistoric Lithic Scatter/Recent Historic Trash Scatter
Description and Setting	This site is located on the eastern side of Elm Creek at the 1100 ft. contour and some 200 m east of Salt Creek. Scattered prehistoric and historic cultural remains are located in the bottom of a dry gully over a 15 m long area. The gully cuts through an open pasture. A careful search of the gully revealed no other cultural remains; the materials have been deposited secondarily.
Cultural Materials	In addition to the iron and sheet metal historic trash, 1 tool and 4 nontool elements were found. A biface of nonheat-treated Kay County chert, 2 heat-treated Kay County and 1 nonheat-treated Foraker chert tertiary elements, and 1 bifacial thinning element of heat-treated Kay County chert comprise the total.
Considerations and Recommendations	There is no cultural context to the materials. Thus, no additional work is recommended. The site is not eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 31, 340S454
Site Type	Prehistoric Lithic Scatter/Historic Trash
Description and Setting	This site is situated on the first major terrace of the eastern bank of Salt Creek at an elevation of 1090 feet. Materials were

exposed in a 15 x 20 m area in cattle paths and at the base of the stream bank slope. A close examination of the adjacent bank revealed no in situ materials. The creek is beginning to erode into the side of the bank, and all the artifacts are from the surface or colluvium. Several pieces of fire-broken rock were also found at the base of the slope. The site is covered with large trees (oaks), and the stream banks are covered with brush.

Cultural Materials

A scraper fragment made on heat-treated Kay County chert and a retouched piece made on a tertiary element of nonheat-treated Kay County chert were found. Of the nontool elements, 1 secondary of heat-treated Kay County chert, 3 secondary of nonheat-treated Kay County chert, 1 secondary of non-heat-treated Foraker chert, 7 tertiary of heat-treated Kay County chert, 4 tertiary of nonheat-treated Foraker chert, a 2 multidirectional cores of nonheat-treated Foraker chert were collected. As well, 2 pieces of modern china fragments were collected.

Considerations and Recommendations

The lack of archaeological context coupled with the paucity of diagnostic artifacts indicates that no further work is necessary. However, the site should be revisited to determine whether context can be established at a later time. At this time the site is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 32, 340S 455

Site Type

Habitation Site

Description and Setting

This site is located on the eastern side of Salt Creek at the base of a steep upland slope. All that remains of the site is a narrow terrace 10 m across; major portions of the site appear to have been removed. Salt Creek is eroding the site. The remaining area is approximately 60 m². A small intermittent spring enters Salt Creek just north of the site. Several trees dot the area, and large boulders are located on the stream side of the site.

Materials were found eroding from the cut bank,

in a cattle path, and on the surface of the terrace. A single 1 x 1 m test pit was excavated. All materials were screened through 1/4 inch-mesh hardware cloth. A depth of 40 cm was reached. Cultural materials were found throughout including stone, bone, shell, and charcoal specks.

Cultural Materials

Surface: A fragment of groundstone exhibiting grinding was collected. It is fabricated of sandstone. The chipped stone tools include a denticulated scraper made on a secondary element of heat-treated Kay County chert. Three bifaces also were collected: a broken specimen of heat-treated Kay County chert measuring 33 mm in width and 7 mm in thickness, a midsection of a tool made on Kay County chert and measuring 7 mm in thickness, and another specimen made on heat-treated Kay County chert and measuring 37 mm in width and 7 mm in thickness. Two retouched pieces, both of heat-treated Kay County chert, one fabricated on a secondary element and the other on a tertiary element were collected. Numerous nontool elements were collected. One primary element of nonheat-treated Kay County chert was found. Seventeen secondary elements were collected. Twelve are of heat-treated Kay County chert, 2 are of nonheat-treated Kay County chert, and 3 are of nonheat-treated Foraker chert. Of the tertiary elements, 62 are of heat-treated Kay County chert, 9 are of nonheat-treated Kay County chert, 11 are of nonheat-treated Foraker chert, and 1 is of Peoria? chert. Three cores of nonheat-treated Foraker chert were collected, as well. Other material of interest is scattered shell.

Level 1 (0-20 cm below surface): No tools were recovered from this level of the test pit, but numerous nontool elements were. Of the primary element category, one of nonheat-treated Foraker chert was recovered. Only 2 secondary elements were recovered, both of heat-treated Kay County chert. Of the tertiary elements greater than 1/4 inch in size, 12 are of heat-treated Kay County chert, 6 are of nonheat-treated Kay County chert, and 8 are of nonheat-treated Foraker chert. From the finer fraction (less than 1/4 inch in size), 67 are of heat-treated Kay County chert and 31 are of nonheat-treated Foraker chert.

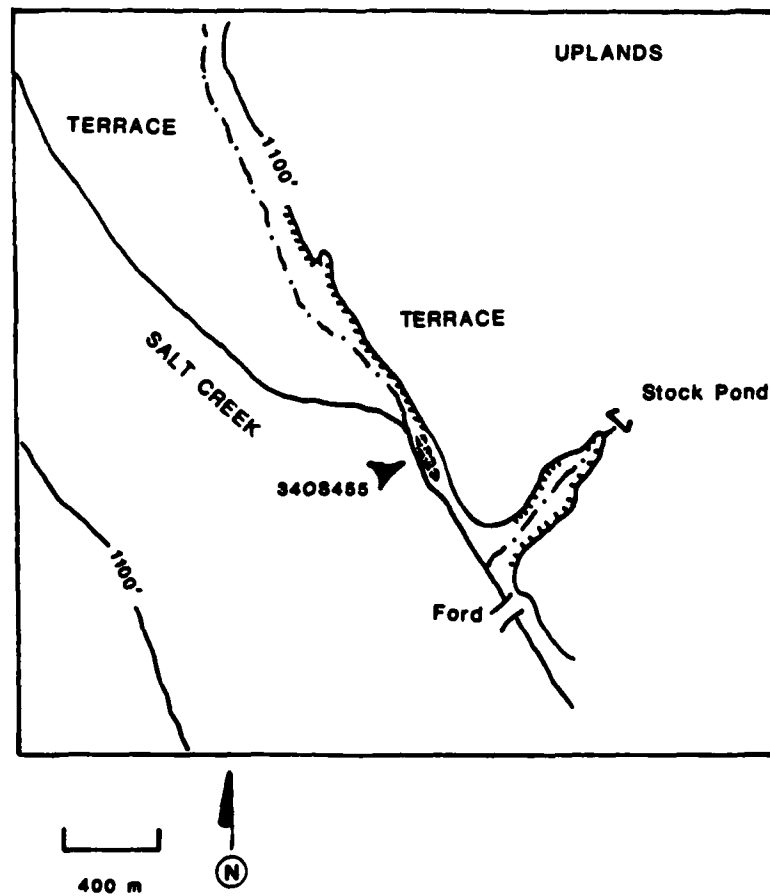


Figure 8

Location of 340S455.

As well, recent seeds, scattered charcoal, numerous heavy bone fragments, and numerous shell fragments were recovered from the matrix.

Level 2 (20-40 cm below surface): Artifactual material was not nearly so plentiful in this level. Two secondary elements of nonheat-treated Foraker chert as well as numerous small flakes of Kay County and Foraker chert were recovered. The finer-fraction flakes are all tertiary elements. Shell, charred and uncharred bone, and charcoal also were recovered.

Site Function

This site is most likely a habitation site of fairly intense occupation.

Consideration and Recommendations

Little remains of this site due to the lateral stream action that has removed most of it. Although a considerable quantity of lithic debris was recovered from the surviving remnant of cultural deposit, the site is not considered eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 33, 340S456

Site Type

Prehistoric Lithic Scatter

Description and Setting

This site is located on the western side of Salt Creek. Cultural materials were scattered on the surface of an eroded terrace slope in an abandoned channel of Salt Creek. All materials appear to have been washed downslope. The site area is about 25 m², and it is in trees but bounded by open pasture. The elevation of the site is 1080 ft. Several 50 x 50 cm shovel tests were placed along the channel edge and dug to a depth of 50 centimeters. No buried cultural materials were recovered in these tests.

Cultural Materials

One tool, a marginally retouched piece of heat-treated Foraker chert, was found. The nontool element sample was comprised of 2 multidirectional

cores of Foraker chert as well as 1 nonheat-treated Foraker chert and 5 heat-treated Kay County chert tertiary pieces.

Site Function

This is a limited activity site which probably is in secondary deposit.

Considerations and Recommendations

Due to the scarcity of the remains and the poor context, no further work is suggested for this site. It is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 39, 340S457

Site Type

Historic Homestead/Prehistoric Lithic Scatter

Description and Setting

This site is situated on a slight knoll on the eastern side of Salt Creek at an elevation of 1090 feet. The site is south of a sizeable gully which holds a periodic spring. The site is north of a ranch road which fords Salt Creek to the west. Most of the knoll is covered with brush and small saplings although small areas of open pasture also occur. Lithic materials were found on the surface of the terrace edge near the gully. The historic remains are located in the brush and sapling stand near the center of the knoll.

Cultural Remains

Six nontool elements comprise the lithic sample recovered at the site: 1 primary element, 1 secondary element, and 1 tertiary element of nonheat-treated Foraker chert; 1 heat-treated tertiary element of Kay County chert; and 2 tertiary elements of nonheat-treated Kay County chert.

The historic remains include scattered pieces of metal, tin cans, and wire. The house has been torn down with some wood flooring, wall lumber, and tar paper remaining.

Considerations and Recommendations

No further work is suggested for the prehistoric component of the site. The historic component is reported to be the family home of Academy Award-winning actor Ben Johnson. The physical remains are scant and do not warrant further work; however, the site may meet other criteria for nomination to the National Register

of Historic Places. Fuller documentation and assessment of the homestead are suggested. The local population (Shidler) should be questioned as to their feelings towards the importance of the homestead to the area.

Site/Find Number

Shidler 40, 340S470

Comment

Both Shidler 62 and Shidler 40 are extensions of Neal's site 340S470. The site, artifacts, and recommendations are discussed in the next section of the report.

Site/Find Number

Shidler 41, 340S458

Site Type

Multicomponent Campsite

Description and Setting

This site is located on the eastern side of Salt Creek in the inner ring of a large bend in the stream. It is situated downstream from Site 340S440 on a high piece of land isolated by several erosional channels. The area is densely vegetated with trees and undergrowth. This growth has not prevented the site from slumping, and the site is being eroded by the stream. The elevation is 1060 feet.

Numerous pieces of Foraker chert are visible in the stream channel. Cultural materials are eroding from several stratigraphic levels at the edge of the terrace. The site area is 50 m².

Cultural Materials

Five tools were collected from the surface of this site. A simple sidescraper measuring 38 mm in length, 26 mm in width, and 8 mm in thickness was made on an interior piece of heat-treated Kay County chert. A stemmed dart point measuring 44 mm in length, 22 mm in width, 8 mm in thickness, 15 mm in stem width, and 13 mm in stem length was made on heat-treated Kay County chert. A broken biface of heat-treated Foraker chert measures 37 mm long and 10 mm thick. Two retouched pieces exhibiting retouch on their obverse surfaces are made on tertiary elements of heat-treated Kay County. Numerous nontool elements were collected. Of the primary elements, one is of heat-treated Kay County chert and the other

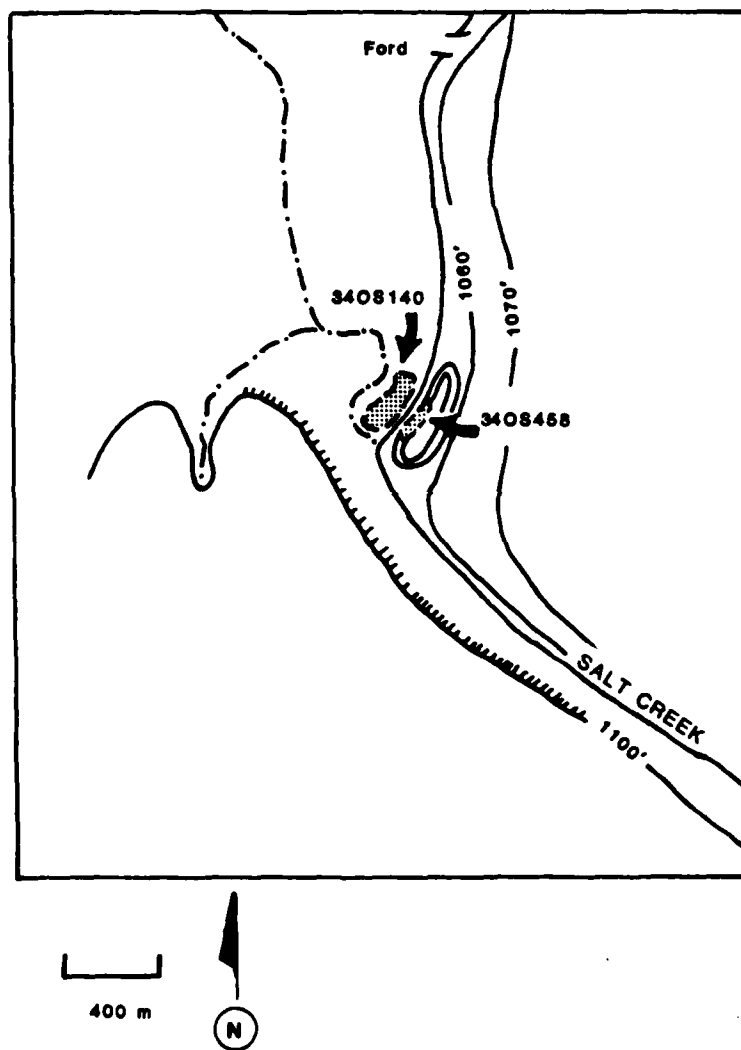


Figure 9

Location of 3408140 and 3408458, Salt Creek.

is of nonheat-treated Foraker chert. Of the secondary elements, 5 are of heat-treated Kay County chert, 5 are of nonheat-treated Kay County chert, and 8 are of nonheat-treated Foraker chert. Of the tertiary elements, 46 are of heat-treated Kay County chert, 11 are of nonheat-treated Kay County chert, 7 are of heat-treated Foraker chert, and 27 are of nonheat-treated Foraker chert. Also, a core of nonheat-treated Foraker chert was collected.

Site Function

This is a habitation site.

Considerations and Recommendations

This site has been severely disturbed by erosion gullyng and by lateral stream incision. It is not considered eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 42, 340S459

Site Type

Description and Setting

This site is located on a stream terrace on the east side of Salt Creek approximately 3 km due east of the intersection of Highway 18 and the Webb City road. The site is partially stabilized by scattered trees along the terrace, but portions of it have been destroyed by erosional slumping and by a ford that cuts through it. The site consists of a lithic scatter eroding at different levels from both banks on either side of the ford. The cultural materials are exposed over an area of about 200 m², and have a profile depth of 50 cm.

Cultural Materials

Six bifaces were collected. One is an ovate specimen measuring 62 mm in length, 52 mm in width, and 14 mm in thickness. An elongate rectangular biface measures 109 mm in length, 50 mm in width, and 20 mm in thickness. Both of these tools are complete and were made of nonheat-treated Foraker chert. Another complete specimen was made on nonheat-treated Foraker chert and measures 61 mm in length, 40 mm in width, and 10 mm in thickness. The broken bifaces are all made on heat-treated Kay County chert. The thicknesses are 14 mm, 18 mm, and 18 mm. The latter is 56 mm wide. Two retouched

pieces were made on tertiary elements of Kay County chert. A broken dart point also was recovered. The corner has been removed, and the tip is missing. Its width is 33 mm, thickness 6 mm, stem width 20 mm, and stem length 9 mm. Of the nontool elements, 5 are secondary, 23 are tertiary elements, and 1 is a core. Four secondary elements are of heat-treated Kay County chert, and 1 is of nonheat-treated Foraker chert. Sixteen tertiary elements are of heat-treated Kay County chert, 3 are of nonheat-treated Kay County chert, 2 are of heat-treated Foraker chert, and 2 are of nonheat-treated Foraker chert. The core is small and made of heat-treated Kay County chert.

Several pieces of mussel shell also were found.

Site Function

This site functioned as a habitation camp.

Considerations and Recommendations

The site appears to have been badly disturbed by construction of the ford which bisects it, and no further action is recommended.

Site/Find Number

Shidler 43, 340S63

Site Type

Prehistoric Lithic Scatter

Description and Setting

This site is situated on the western side of Salt Creek on the eastern side of an intermittent stream which enters Salt Creek to the south. It is on a narrow parcel of land between the uplands and Salt Creek. The site is at the edge of a cultivated field. Trees are on the upland slopes and along the river. A light scatter of materials was found within an 150 m² area. The materials were confined to the surface. Exposures were checked in the banks of the two streams, but no buried deposits were found. The site is at an elevation of 1060 feet. Shidler 44, an isolated find, is located at the northern edge of the field.

Cultural Materials

One retouched piece of heat-treated Kay County chert is the only tool found. Retouch is confined to one lateral edge. Three secondary elements of nonheat-treated Foraker chert, 3 tertiary elements of heat-treated Kay County chert, 1 tertiary element of nonheat-treated

Foraker chert, and 1 core of nonheat-treated Foraker chert comprise the nontool sample collected.

Site Function

This probably represents a limited activity site.

Considerations and Recommendations

This site is in poor context since the site has been disturbed by cultivation. No depth to the cultural deposit is evident. Thus, no further work is required. This site is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 47, 340S460

Site Type

Prehistoric

Description and Setting

This site is located on the western bank of a south-running gully on the eastern side of Salt Creek. The gully is a major feature cutting from the uplands through the floodplain to the creek. The site sits on the edge of an ill-defined floodplain terrace 10 m above and 200 m north of the present channel at an elevation of 1070 feet. The extent of the site is unknown because it appears only as a 10 m stretch of the gully about 20 cm below the present surface. No materials were found on the surface nor in any other erosional exposures nearby. Associated with the cultural material is a thin band of unworked limestone debris.

Cultural Materials

Four chert flakes, two exhibiting edge modification, and one piece of deer long bone represent the cultural remains found at the site. The two nontool elements are secondary and are of nonheat-treated Foraker chert. One retouched piece is secondary, the other tertiary. Both are of nonheat-treated Foraker chert. The lengths are 30 and 60 mm, the widths 37 and 40 mm, and the thicknesses 6 and 17 mm.

Considerations and Recommendations

No further work is recommended for this site. It is likely that the materials are in a secondary deposit washed in from upslope. This site is not eligible for nomination to the National Register of Historic Places.

Site/Find Number	Shidler 49, 340S461
Site Type	Prehistoric Lithic Scatter
Description and Setting	This site is situated on the southern edge of a dry erosional gully downslope from a small man-made stockpond. It is 1.5 km upstream from the confluence of Wamsley Creek and Salt Creek. In the past the gully may have been streamfed. The small lithic scatter covers 50 m ² and is on a slight incline about 20 m above and 200 m north of the present Salt Creek stream channel. The elevation is 1120 feet.
Cultural Materials	Three chert flakes (2 secondary and 1 tertiary) and a unifacially worked secondary element were found on the surface. All are of nonheat-treated Foraker chert and were collected. Several other unworked pieces of Foraker chert were observed. The tool has several areas of continuous abrupt retouch on the obverse surface and an area of bifacial retouch confined to the marginal edge. Its length is 40 mm, width 53 mm, and its thickness 15 mm.
Site Function	This site appears to have functioned as a limited activity site of a short duration.
Considerations and Recommendations	No further work is recommended for this site. There is little depth to the cultural deposit, and no diagnostic materials are likely to be recovered. The lack of debris and the presence of the unworked chert suggests that the site may have been a minor workshop area where locally available Foraker chert was utilized. Construction of the stockpond and the resultant alteration of the erosional characteristics of the spring channel may have destroyed a portion of the site. This site is not eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 50, 340S462
Site Type	Prehistoric Lithic Scatter
Description and Setting	This site is located on the eastern side of Salt Creek on the northern edge of a major erosional gully that has been dammed for a

stock pond. The site is in a wind eroded and sheet washed area on a ridge knoll which is at an elevation of 1110 feet. The area of the scatter is 30 m². Some bedrock outcrops in the site area, and the site overlooks Salt Creek. There are virtually no subsurface deposits, and the deposit is shallow. A farm road passes thorough the eastern portion of the site. The site is just downstream from and above Site 32.

Cultural Material

Four tertiary elements of heat-treated Kay County chert were collected.

Site Function

This is a limited activity site.

Considerations and Recommendations

No further work is necessary at the site due to the scant remains and the questionable context. This site is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 51, 340S463

Site Type

Prehistoric Lithic Scatter/Recent Historic Cellar

Description and Setting

This site is on the western side of Salt Creek just south of a major erosional gully at an elevation of 1090 feet. Cultural materials were found on the upper edge of the gully scattered over an area 75 m in length. All lithic artifacts were recovered from the surface; good subsurface exposures reveal no additional cultural material. A single concrete cellar which is partially subsurface comprises the historic component of the site.

The gully is wooded but surrounded by open pasture. The elevation of the site is 1090 feet.

Cultural Materials

Lithic artifacts collected include: 2 nonheat-treated tertiary elements of Kay County chert, 1 nonheat-treated tertiary element of Foraker chert, 3 large multidirectional cores of Foraker chert, and several unmodified cobbles of Foraker chert. The historic remains include iron stove parts, several pieces of unmarked porcelain, and broken glass.

Site Function	The lithic scatter may have functioned as a lithic resource procurement area and a limited activity area.
Considerations and Recommendations	Other than dating the cellar, no further work is recommended for this site. The site is not eligible for nomination to the national Register of Historic Places.
Site/Find Number	Shidler 52, 340S142.
Site Type	Historic Homestead/Prehistoric Lithic Scatter
Description and Setting	See review of Neal's survey presented in a following section of this monograph.
Cultural Materials	In addition to the materials collected by Neal, the Tulsa survey recovered 13 pieces of Foraker chert. One broken sidescraper was made on a nonheat-treated tertiary element. One primary element of nonheat-treated chert, 9 secondary elements of nonheat-treated chert, 1 tertiary element of nonheat-treated chert, and 1 fragment of a multidirectional core were collected.
Considerations and Recommendations	The historic remains have been covered by bulldozed materials to protect livestock from potential injury. Additionally an exploratory "oil-gas" well was drilled near the site. Other than dating the historic remains, no further work is required. the site is not eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 53, 340S464
Site Type	Prehistoric Lithic Scatter
Description and Setting	Cultural materials were located on a low limestone ridge on the eastern side of Salt Creek 200 m from its channel. The lithic scatter is just east of the Osage Mansion in an open pasture area. A wooded area is just to the west of the site. A ranch road runs through a portion of the scatter. Sediments are very shallow. Lithic material was scattered over a 300 m ² area. The elevation of the site is 1060 feet.

Cultural Materials	Six nontool elements were recovered: 3 heat-treated tertiary pieces of Kay County chert, 2 nonheat-treated tertiary elements of Foraker chert, and a multidirectional flake core of Foraker chert.
Site Function	The scatter represents a limited activity area.
Considerations and Recommendations	The paucity of cultural materials, the lack of diagnostic artifacts, and the shallowness of the deposit lead to the conclusion that no further work is required at this locality. The site is not eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 56, 340S465
Site Type	Prehistoric Lithic Scatter and Quarry Area
Description and Setting	This site likely is outside the floodpool of the proposed reservoir. It is located on a ridge east of Salt Creek at an elevation of 1130-1150 feet. Foraker chert outcrops on the ridge, and the situation is similar to that of Site 340S469. The creek is about 1 km to the west. Open pasture surrounds the ridge. A road runs across the site. The entire ridge has scatters of Foraker chert nodules. Many fractured pieces were noted at the site, and a number of these undoubtedly are the results of nonhuman activity.
Cultural Materials	This site was not collected. Numerous pieces of the chert were noted as were numerous pieces with one or more flakes removed. No tools were noted.
Considerations and Recommendations	No further work is suggested for this site. It is not eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 58, 340S146
Site Type	Workshop/Campsite
Description and Setting	The Tulsa survey identified this location as Site 58. It is the northern part of Neal's

Site 340S138. Refer to the following section dealing with Neal's sites for a description.

Cultural Materials

In addition to the material found by Neal, this survey located 2 tools and 7 nontool elements. A large pointed biface of nonheat-treated Kay County chert and a notch with some bifacial work made on a secondary element of heat-treated Kay County chert were found. One tertiary element of heat-treated Kay County chert and 4 tertiary elements of nonheat-treated Foraker chert as well as 2 cores of Foraker chert comprise the nontool sample.

Site Function

Neal determined that this site was both a limited activity workshop site and a temporary campsite.

Considerations and Recommendations

This site is not considered eligible for nomination to the National Register of Historic Places. However, it will be inundated by the proposed Shidler Lake.

Site/Find Number

Shidler 60, 340S469

Site Type

Lithic Quarry/Workshop

Description and Setting

Upon reinvestigation it was determined that this site is part of Neal's previously recorded Site 340S469. Refer to this section of the monograph for a description.

Cultural Materials

No materials were collected from the site. Foraker chert outcrops in this site.

Comment

Refer to the next section of the monograph for the recommendations and considerations.

Site/Find Number

Shidler 61, 340S466, Osage Mansion

Site Type

Historic House and Grounds

Description and Setting

This is a historic site referred to as the "Early Osage Mansion".. It was built between 1915-1920, and has been burnt and rebuilt several times since. The site consists of a

two-story native stone house with a surrounding porch, a detached stone garage, a detached pumphouse and well. The graves of two children are marked by headstones to the south and west of the house. The site is located on the east side of Salt Creek 1 km north of the junction of Salt and Walmsley creeks, about 50 m east of the present channel. It is currently in lightly wooded open pasture.

Cultural Materials

No materials were collected from the site.

Comment

The site lies within the projected conservation pool of Shidler Lake. It should be thoroughly researched by a qualified historian to determine whether it is eligible for consideration to the National Register of Historic Places.

Site/Find Number

Shidler 62, 340S470

Comment

Both Shidler 40 and Shidler 62 are extensions of Neal's site 340S470. The site, artifacts, and recommendations are discussed in the next section of the report.

Site/Find Number

Shidler 63, 340S467

Site Type

Prehistoric Lithic Scatter

Description and Setting

Cultural materials were found at the base of a stream cut by an old oxbow channel on the eastern side of Salt Creek. The materials are scattered over an area 15 m length. No materials were found in context, and no buried soils were noted in the exposures. Numerous recent mussel shells litter the creek bed. The site is just downstream from a low-water dam. Open pasture and cultivated fields are found on the floodplain, and trees are found along the stream edge. The elevation is 1115-1120 feet.

Cultural Materials

A biface, broken transversely, exhibiting one distinctly beveled edge was fashioned from heat-treated Kay County chert. One tertiary element of a white chert, probably Peoria, and a large core of tabular nonheat-treated Foraker

chert comprise the nontool sample. As well, one metatarsal was found. Although identification is not possible, the bone is either Bos or Bison.

Considerations and
Recommendations

No further work is recommended although the area should be revisited to check for further materials with cultural context. The site presently is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 64, 340S468

Site Type

Historic Site--Shidler Country Club

Description and Setting

This site is situated on the uplands overlooking the Salt Creek Valley. The structure was built in the 1920s after money from the oil finds came to the area. At one time, it was the largest building in Osage County. In the 1930s the club was closed and the materials sold for salvage. Present remains include the concrete and brick foundations with considerable rubbish contained within and outside the walls. The site is outside the reservoir limits.

Cultural Materials

No materials were collected from the site although crockery, broken glass, metal, marble slabe, and brick are visible.

Considerations and
Recommendations

The site will be impacted indirectly if the reservoir is built, but it is not eligible for nomination to the National Register of Historic Places.

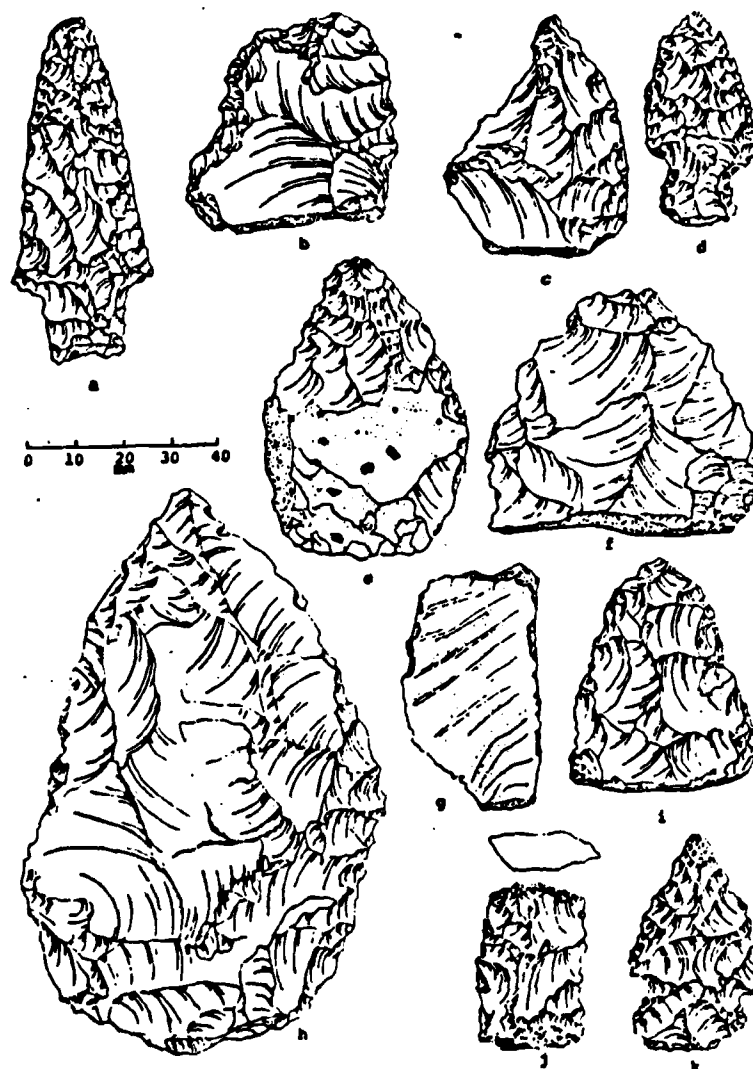


Figure 10

- a. . Bulverde point from Shidler 36
- b. Biface from Shidler 38
- c-d. Biface and point from 340S458
- e-f. Bifaces from 340S459
- g. Retouched piece from Shidler 45
- h. Biface from Shidler 58
- i-k. Biface, knife, and point from 340S470

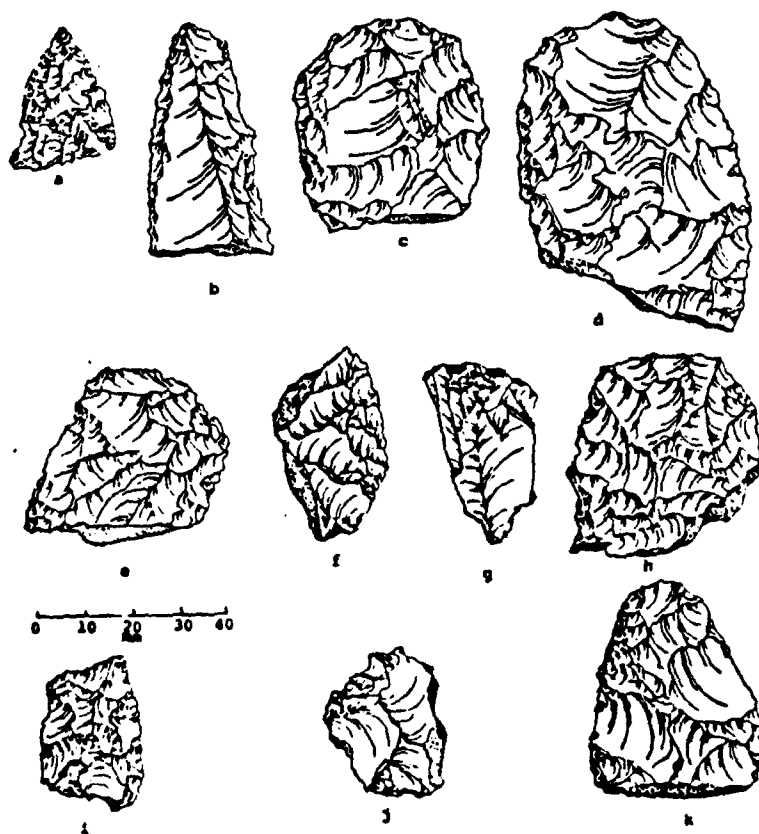


Figure 11

- a-e. Point, sidescraper, and biface fragments from 340S445
- f. Biface fragment from 340S446
- g. Single-platform core from 340S446
- h. Biface from 340S450
- i. Biface from 340S453
- j-k. Scraper and biface from 340S455

REASSESSMENT OF PREVIOUSLY LOCATED SITES

This section deals with the sites found by Neal's 1973 survey of the Shidler Lake project area. Some of the sites of that survey were not revisited for various reasons, and these are noted. A short summation of Neal's findings and recommendations is followed by a comment on the current status of the site.

Site Number/Name	Site 340S424, the Roach Site
Site Type	Prehistoric/Historic Habitation
Description	The Roach Site is located on a stream terrace on the eastern bank of Salt Creek. Material was found along the 1500-foot length of the terrace when Neal found the site in 1973. Neal found little historic debris, but the owner reported a late nineteenth century Osage occupation of the site.
Cultural Materials	Neal collected several tools and nontool elements which were of both Kay County and Foraker chert. Foraker chert is reported to be particularly plentiful in the form of "large workshop pieces." The landowner reported evidence of a hearth and has collected dart and arrow points and grinding implements from the site. No pottery has been reported or found.
Recommendations	Neal recommended that extensive testing be carried out at this site with the option for a more extensive excavation left open.
Comments	This site is outside the current boundaries of the reservoir. Thus, it was not revisited under the present contract.
Site Number/Name	Site 340S145, the Ross Site
Site Type	Prehistoric Workshop
Description	This site is located on a ridge of outcropping Foraker chert. Materials are scattered on the

	outcrop and its slopes. Cherts are also visible in the bed of Salt Creek in this locality.
Cultural Material	Nodules and debris of Foraker cherts were noted by Neal who collected a chipped stone tool (a gougelike implement) and a hammerstone as well as several nontool elements.
Recommendations	Neal recommended an intensive controlled surface collection of the outcrop and slopes and test pits into the alluvial deposits at the base of the slope.
Comments	This site was not revisited because permission was not granted by the owner.
Site Number/Name	Site 340S146, the Hunt Site #1
Site Type	Prehistoric Habitation
Description	This site is situated on the eastern bank of Salt Creek on a terrace and old ridge remnant about 0.5 km east of the town of Shidler. The site has been cultivated in the past, and soils are approximately a meter in depth. Site area is in excess of six acres.
Cultural Materials	Dart points are reported from the site from the time of cultivation. Neal collected scrapers, graters, cobbles, and nontool elements from the surface. Both Foraker and Kay County chert was collected.
Recommendations	Neal recommended excavations for this site.
Comments	Permission to revisit the site was not obtained.
Site Number/Name	340S469, the Hunt Site #2
Site Type	Prehistoric Workshop
Description	The site is situated on a ridge top on the eastern side of Salt Creek about 1.5 km east of Shidler. Foraker chert outcrops on the ridge. Soil depth is variable. The site was in pasture.

Cultural Materials	The tool and nontool elements collected by Neal are all of Foraker chert.
Recommendations	Neal recommended excavations in conjunction with a controlled surface survey.
Comments	We concur with Neal's recommendation. However, the available data do not indicate that the site is eligible for nomination to the National Register.
Site Number/Name	Site 340S470, the Hadden site #1, Tulsa localities 40 and 61
Site Type	Prehistoric Habitation/Workshop
Description	This site is situated on a long ridge remnant on the western bank of Salt Creek and the eastern bank of a small tributary stream where the two watercourses converge. Foraker chert outcrops in the banks of both streams. The site is at least four acres in areal extent with a sediment depth to as much as half a meter. Neal reports an historic grave in the area of the site, but this was not relocated by the Tulsa survey.
Cultural Materials	<p>Almost 200 tools and nontool elements were collected by Neal. The raw materials utilized at the site include the usual Foraker and Kay County cherts and a single piece of Peoria? chert.</p> <p>Additional materials were collected during the Tulsa survey. Bifaces and biface fragments dominate. They include: a broken elongate biface of nonheat-treated Foraker chert measuring 42 mm in width and 13 mm in thickness, a fragment measuring 4 mm in thickness and made on heat-treated Kay County chert, a broad ovate specimen of heat-treated Kay County chert measuring 64 mm in width and 16 mm in thickness, a lanceolate form of heat-treated Kay County chert measuring 39 mm in width and 12 mm in thickness. Also recovered is a broken double-beveled knife measuring 20 mm in width and 7 mm in thickness. A dart point of nonheat-treated Kay County chert is unbroken and measures 42 mm in length, 26 mm in width, 7 mm in thickness, 23 mm in stem width, and 14 mm in stem length. Two retouched pieces, both made on tertiary elements, one on nonheat-treated</p>

Foraker chert and the other on nonheat-treated Kay County chert were found.

Two secondary elements were found. One is of heat-treated Kay County chert and the other of nonheat-treated Foraker chert. Of the 10 tertiary elements, 3 are of heat-treated Kay County chert, 2 are of heat-treated Foraker chert, and 5 are of nonheat-treated Foraker chert.

Recommendations

Neal recommended that this site be excavated.

Comments

We concur with Neal's recommendations. However, the available data do not support a recommendation of eligibility to the National Register of Historic Places.

Site Number/Name

Site 340S457, the Hadden Site #2

Site Type

Prehistoric Workshop

Description

This site is located on a sloping ridge remnant and extends to a terrace above Salt Creek. Outcrops of Foraker chert are littered with "workshop debris." Soil deposits are thought to be as much as a meter in depth. The site covers approximately 10 acres.

Cultural Materials

Some 30 tools and 253 nontool elements were collected by Neal. A majority of the artifacts are of Kay County chert although Foraker chert is also quite plentiful.

Recommendations

Neal suspects that the Hadden Site #2 and the Hadden Site #1 may be very similar. If testing indicates that this is the case, one or the other should be excavated.

Comments

This may be the same site as Tulsa Shidler 41. If so, extensive testing is appropriate. If not, then this site was not relocated. This site is not eligible for nomination to the National Register of Historic Places.

Site Number/Name	Site 340S142, the Hadden Site #3
Site Type	Workshop /Historic House
Description	This six-acre site is on the western bank of Salt Creek on a ridge slope where Foraker chert outcrops. Soil deposits are shallow.
Cultural Materials	A small number of nontool elements of Foraker and Kay County chert were collected.
Recommendations	Neal felt that no further work was necessary at this site.
Comments	We concur with Neal's recommendation concerning the prehistoric component. The house was bulldozed in the summer 1980, and if possible it should be dated.
Site Number/Name	Site 340S143, the Hobbs Site
Site Type	Habitation
Description	This site is situated on the eastern bank of Salt Creek south of the Foraker road bridge. The site is on a terrace which may be destroyed as Salt Creek meanders towards it. Cultural materials were eroding from about 10 cm below the surface adjacent to the stream. The site is about six acres in size and oriented in an east-west direction.
Cultural Materials	A small number of tools and 305 nontool elements were recovered from this site. Most artifacts are of Kay County chert although a small amount of Foraker chert and petrified wood also were collected.
Recommendations	Neal recommended that this site be excavated.
Comments	This site is located on Indian-controlled lands access to which is not permitted. In that the description by Neal indicates an in situ deposit, testing should be carried out. This site is not eligible for nomination the National Register of Historic Places.

Site Number/Name	Site 340S144, the Oliphant Site
Site Type	Habitation/Workshop
Description	<p>This site is on the eastern bank of Salt Creek on the top of a ridge formed by outcropping Nevalimestone and the terrace of Salt Creek. Neal describes two parts to the site, a workshop associated with the Neva formation which is chert-bearing at this locality and a habitation portion on the stream terrace and adjacent ridge toe. Vegetation cover made assessment of the area quite difficult in 1973. Soils are thought to be 0.5 to 2.5 m in depth.</p>
Cultural Materials	<p>Most of the nontool elements and nodules found on the site were of Neva chert although limited amounts of Kay County and Foraker chert also were collected by Neal. No diagnostic artifacts were found.</p>
Recommendations	<p>Neal recommended test excavations in both parts of the site with the option of additional intensive excavation if warranted at that time. He also recommended that the site be revisited when the vegetation cover was less intense.</p>
Comments	<p>During the 1980 revisit to the site, the problem of heavy vegetation obscuring the surface persisted. Discerning the results of natural versus human activity at the locality was difficult, especially in the workshop area. This site should be revisited when the vegetation cover has died down, as originally suggested by Neal. The pasture area should be tested. This site is not eligible for nomination to the National Register of Historic Places.</p>

FIND SPOT DESCRIPTIONS

Site/Find Number	Shidler 3
Comment	Upon revisitation, it was decided that the several pieces of blocky Foraker chert were cattle retouched rather than reworked by human hands. Shidler 3 is no longer considered an isolated find.
Site/Find Number	Shidler 4
Site Type	Prehistoric/Historic Isolated Find
Description and Setting	This find is located on the east bank of Salt Creek just south of a farm road which crosses the creek. It is situated on the first major terrace of the creek at about the 1130 foot contour. Two flakes, several pieces of bottle glass, and a fragment of a china bowl were found in fairly close proximity. The cattle path in which the artifacts were found traverses an open pasture. There is no depth to the "site".
Cultural Materials	One primary and one secondary heat-treated Kay County chert flakes were found. These flakes exhibited no retouch. The historic glass shards are similar to a coke bottle. The bowl fragment is slipped china.
Considerations and Recommendations	No further investigations are warranted. This locality is not eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 6
Site Type	Prehistoric Isolated Find
Description and Setting	A single flake was found in a sheet washed area of an open pasture which has been cultivated in the past. The flake was situated about 50 m from the east bank of Salt Creek just south of a small erosional gully. The gully was examined since it provided a good exposure face, but no additional material was found. Elevation is approximately 1125 feet.

Cultural Materials	One secondary heat-treated Kay County chert flake was found. The flake exhibited no retouch.
Considerations and Recommendations	No further work is required. This find is not eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 8
Site Type	Prehistoric Isolated Find
Description and Setting	Two large flakes of Foraker chert were found approximately 10 m apart on the northern side of a southeast-flowing dry gully about 300 m northwest of Salt Creek. The gully cuts through bedrock, and the flakes were found on bedrock. Little sediment has been deposited in this area. The find is situated in an open grassland setting at an elevation of 1130 feet.
Cultural Materials	Two secondary elements of nonheat-treated Foraker chert comprise the find.
Considerations and Recommendations	Due to the paucity of artifactual remains and the lack of a cultural deposit, no further work is recommended for this isolated find. It is not considered eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 9
Site Type	Noncultural Shell Lens
Description and Setting	A shell lens 3 m long and 2 to 3 shells thick was found on the west bank of Elm Creek just north of its junction with Dugout Creek. This shell lens appeared to be in association with a black stain about 3 m below the present surface. However, the in situ shells were not broken and are judged to be a natural deposit buried in the past and just now being uncovered. The dark stain is a recent stream deposit and has no depth. No cultural material was associated with the lens, and no shells were collected.
Considerations and Recommendations	Since this is a natural deposit of shells recently exposed by stream erosion, no further work is necessary at this locality. However, if a

large-scale mitigation project is undertaken, this shell lens or others like it could be of potential utility in an environmental reconstruction program centering on the development of Elm and Salt Creeks.

Site/Find Number

Shidler 12

Site Type

Prehistoric Isolated Find

Description and Setting

A single simple sidescraper was found in an exposed surface area near the creek bank on the east side of Elm Creek. The locality is approximately 100 m north of the junction of Dugout and Elm Creeks. The first terrace of the creek where the scraper was found is at an elevation of about 1100 feet. In addition to the terrace, the stream bank and an intermittent spring channel just north of the find were examined for cultural materials. Although no materials were found during this examination, the area was revisited and an isolated biface was picked up in the Elm Creek channel just west of the spring.

Cultural Materials

The biface is included with the sidescraper as the cultural remains of this locality. The sidescraper was made on an elongated tertiary flake of heat-treated Kay County chert. The piece exhibits scraper retouch along the length of the left marginal edge as well as some light retouch along the right edge. All retouch is confined to the obverse surface. The distal portion of the piece is broken transversally. The length of the remaining portion is 58 mm, the width 34 mm, and the thickness 7 mm. The biface is rectangular in outline and is classified as a subgroup II biface. Most of the cortex of the original flake has been removed, but enough remains to suggest that the piece had been fashioned from a cobble of Foraker chert. It had not been heat-treated. The length is 65 mm, the width 44 mm, and the thickness 21 mm.

Considerations and Recommendations

No further work is suggested for this site. The area around the spring though seemingly an ideal site location has yielded no additional cultural remains during several revisits. This find is not eligible for nomination to the National Register of Historic Places.

Site/Find Number	Shidler 13
Site Type	Isolated Bone Find
Description and Setting	Several pieces of very fragmentary large mammal (<u>Bison or Bos</u>) were found eroding from the south bank of Elm Creek west of its junction with Dugout Creek. This bone concentration is located 2.5 m below the present surface. Several small bone fragments were found in a nearby cattle path at the same stratigraphic level. All fragments are in a very poor state of preservation. Also, no cultural materials are in association with the bone. A nearby gravel lens suggests that the bones were washed in.
Considerations and Recommendations	No further work is required at this location. The deposits likely are secondary, and the state of preservation is such that species identification is impossible. It is likely that these bones are from cattle, but there is a slight possibility that they are bison. This locality is not eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 14
Site Type	Prehistoric Isolated Find
Description and Setting	A single heat-treated flake of Kay County chert was found on the first major terrace of the south bank of the Elm Creek just west of its confluence with Dugout Creek. The first major terrace is at an elevation of 1130 feet. It was first thought that a small mound near the find was of cultural origin, but shovel tests revealed no cultural remains.
Cultural Materials	A single secondary flake of heat-treated Kay County chert was found. It exhibits no retouch.
Considerations and Recommendations	Since no cultural deposits were found in this area, no further work is recommended for this locality. It is, however, approximately 100 m from Site 17 which is east on the same terrace and which is eligible for nomination to the National Register of Historic Places. This locality is not eligible.

Site/Find Number	Shidler 18
Site Type	Prehistoric Isolated Find
Description and Setting	A single tertiary flake of heat-treated Kay County chert was found on the surface at the head of a short erosional gully on the northern bank of Elm Creek. A careful check of the entire gully revealed no further cultural remains. The artifact was in secondary deposit. The elevation of the locality is 1100 feet.
Cultural Materials	A single heat-treated interior flake of Kay County chert was found.
Considerations and Recommendations	Since no cultural context is associated with this isolated find, no further work is recommended. This locality is not eligible for nomination to the National Register of Historic Places.

Site/Find Number	Shidler 21
Site Type	Isolated Bone Find
Description and Setting	A single large midsection fragment of a humerus of <u>Bos</u> or <u>Bison</u> as well as several other long bone fragments were found scattered in a steep cattle path on the southern side of Elm Creek just east of its confluence with Salt Creek. The bones appear to be eroding from deposits about 1 m below the surface. No lithic cultural remains were found, and whether the bones are in primary context was not determinable. The locality is at an elevation of 1090 feet.
Considerations and Recommendations	No further work is required at this location. The deposits likely are secondary. The fragmentary nature of the bone does not permit species identification. This locality is not eligible for nomination to the National Register of Historic Places.

Site/Find Number	Shidler 26
Site Type	Prehistoric Isolated Find
Description and Setting	A single chert flake was found on the north bank

of Elm Creek approximately 400 m downstream from the junction of Dugout and Elm Creeks. The flake was found in a cattle path in a pasture on the first terrace about Elm Creek at an elevation of approximately 1100 feet. A careful search of the surrounding area and creek bank yielded no additional cultural remains.

Cultural Materials

A single heat-treated tertiary flake of Kay County chert represents the entire material culture sample collected from this locality.

Considerations and Recommendations

No further investigations are warranted. This locality is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 30

Site Type

Prehistoric Isolated Find

Description and Setting

This locality is situated on the eastern side of Salt Creek south of its junction with Elm Creek. The locality is on the edge of the second and major terrace above and 300 m from the Salt Creek channel. North is an erosional gully. Within an area of 50 m², the three artifacts were found. The find is in a large open pasture with large erosional areas. No materials were found in the exposures. The elevation of the locality is 1100 feet.

Cultural Materials

A single platform core made on a tabular Foraker chert nodule and 2 heat-treated Kay County tertiary elements were found.

Considerations and Recommendations

No further work is warranted at this locality. This locality is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 34

Site Type

Prehistoric Isolated Find

Description and Setting

Cultural materials were found at the base of an eroded terrace slope on the western bank of Salt Creek at an elevation of 1080 feet. There is no context to the find. Open pasture characterizes the locality.

Cultural Materials

A multidirectional core of Foraker chert and a large nonheat-treated secondary element of the same chert were found.

Considerations and Recommendations

No further work is necessary at this locality. The find is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 35

Site Type

Noncultural Shell Midden

Description and Setting

This shell midden is located on the eastern bank of Salt Creek on the northern side of a large erosional gully. The midden is about 50 cm below the surface and is exposed in the bank of a narrow terrace. Shells are 30 cm in depth and extend for 1.5 m. The shells are not broken or cut. No cultural materials were found. It is our conclusion that this is a natural deposit. The elevation of the find is 1090 feet.

Cultural Materials

No cultural materials were found in association with the shell midden.

Considerations and Recommendations

No further work is necessary, and this locality is not eligible for nomination to the National Register of Historic Places. However, the midden does indicate that mussels were present in Salt Creek and were a potential food resource. Should a full-scale mitigation project be undertaken in the basin, localities of this sort may provide valuable information for paleoenvironmental reconstruction.

Site/Find Number

Shidler 36

Site Type

Prehistoric Isolated Find

Description and Setting

A single projectile point was found in the bottom of a dry periodic spring channel which parallels Salt Creek about 200 m to the west. The channel enters Salt Creek almost 1 km south of the confluence of Salt and Elm Creeks. A careful search of the area yielded no additional cultural remains that could be associated with the point. At one time the spring channel may have been associated

with Salt Creek, the channel of which later meandered to the west leaving the spring and runoff water to flow in the older channel now paralleling the present creek. If so, the point may be quite removed from its origin.

Cultural Materials

The point is of white Keokuk chert. The point exhibits a triangular blade with straight edges. Shoulders are present and have been thinned to a slightly obtuse configuration. The stem is parallel sided, and the base is concave. The point is a Bulverde like dart point. Its length is 70 mm, its width 27 mm, its thickness 8 mm, its weight 66.6 grams. The stem length is 16 mm and the stem width 15 mm.

Considerations and Recommendations

No further work is recommended for this locality although the area should be reexamined periodically for materials in better context. This locality is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 38, field numbered 37-38

Site Type

Prehistoric Isolated Find

Description and Setting

Several pieces of cherts were found in the creek bank near a low-water ford of Salt Creek just south of a spring gully. Materials were found in both the eastern and western banks, but there is no archaeological context. The scant material likely is in secondary context.

Cultural Materials

One multiple tool classed as varia and one secondary element of nonheat-treated Foraker chert were collected. The tool exhibits scraper retouch, bifacial retouch, and a notch; and it has been fashioned on a tertiary element of heat-treated Kay County chert.

Considerations and Recommendations

No further work is necessary at this find. The locality is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 44

Site Type

Isolated Find

Description and Setting

A single piece of Foraker chert was found on the western side of Salt Creek on the northern part of a large meander stream. Site 43 is located in the southern area of the same field. The field has been plowed recently, and trees grow along the creek. Salt Creek forms a large pool just above the area. The elevation is 1060 feet.

Cultural Materials

One secondary element of nonheat-treated Foraker chert was found.

Considerations and Recommendations

No further work is suggested for this locality. However, the field should be rechecked for additional materials at a later date. The find is not eligible for nomination to the National Register of Historic Places.

Site/Find Number

Shidler 45

Site Type

Prehistoric Isolated Find

Description and Setting

The cultural materials were found on the surface on the western bank of an erosional gully which has been dammed upslope to the north to form a stock pond. The locality is 1.3 km east of Salt Creek and 100 m north of Wamsley Creek and south of an abandoned railway spur. A close inspection of the gully revealed no other cultural materials. Whether the artifacts are in primary context was not determinable, but it is likely that they have been displaced from the uplands to the north. Open pasture surrounds the gully, and the elevation is 1060 feet.

Cultural Materials

A retouched piece on a tertiary element of heat-treated Kay County chert is the only tool found. Retouch is confined to the margin of the inverse face of the piece. Two large multidirectional cores made on tabular forms of Foraker chert also were found.

Considerations and Recommendations

No further work is required at this locality. The find is not eligible for nomination to the National Register of Historic Places.

Site/Find Number	Shidler 46
Site Type	Noncultural
Comment	The material collected is not cultural in origin.

Site/Find Number	Shidler 48
Site Type	Isolated Find
Description and Setting	This find is situated on the western side of Salt Creek on the north wall of an intermittent stream about 100 m from its confluence with Salt Creek. The locality is west of Site 340S470 and just east of the junction of two intermittent streams. A flake and a cow tooth were found 10 cm below the surface. A careful search of the stream banks revealed no other cultural materials. The materials probably were washed in. The find is surrounded by open pasture, and the elevation is 1060 feet.

Cultural Materials	A tertiary element of heat-treated Kay County chert was found.
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Considerations and Recommendations	No further work is required at this locality. This isolated find is not eligible for nomination to the National Register of Historic Places.
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Site/Find Number	Shidler 54
Site Type	Prehistoric Isolated Find
Description and Setting	This find is on the eastern side of Salt Creek on the southeastern edge of a prominent knoll about 200 m southeast of the stream. Bedrock outcrops on the knoll, but grass grows on the knoll and scrub oak on the slopes. The elevation is 1080 feet. The materials were in a small blowout area.

Cultural Materials	One heat-treated and one nonheat-treated tertiary element of Kay County chert were found.
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Considerations and Recommendations	With the lack of materials and no depth to the find, no further work is necessary; and the find
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is not eligible for nomination to the National Register of Historic Places.

Site/Find Number	Shidler 55
Site Type	Prehistoric Isolated Find
Description and Setting	A tool and a nontool element were located on the eastern side of a small stock pond east of Salt Creek and north of Wamsley Creek and an abandoned railway grade. Salt Creek is 1.3 km to the west. The artifacts were found at the base of the upland slope. No buried materials were present. Open pasture surrounds the locality, and the elevation is 1100 feet. Wamsley Creek is about 200 m to the south.
Cultural Materials	The tool is a single notch made on a nonheat-treated Kay County chert tertiary element. One tertiary element of nonheat-treated Foraker chert also was found.
Considerations and Recommendations	No further work is warranted at this locality. The find is not eligible for nomination to the National Register of Historic Places.
Site/Find Number	Shidler 57
Site Type	Prehistoric Isolated Find
Description and Setting	Two nontool elements were found on the eastern side of Salt Creek 150 m from the stream channel on a raised limestone knoll. Bedrock outcrops on the knoll, and the artifacts were found on the southeastern portion of the knoll. There is a good view of the valley from the knoll. Woods are to the west, and open pasture surrounds the locality in the other directions. The elevation is 1080 feet.
Cultural Materials	One heat-treated and one nonheat-treated tertiary element of Kay County chert were found.
Considerations and Recommendations	No further work is necessary at this find. The locality is not eligible for nomination to the National Register of Historic Places.

Site/Find Number	Shidler 59
Site Type	Noncultural
Comment	The several pieces of material collected in the field show noncultural fractures. The locality is utilized as a cattle resting area.
Site/Find Number	Shidler 65
Site Type	Buried Shell Midden
Description and Setting	The site is outside the reservoir boundaries downstream from the proposed dam locality. It is situated on the western side of Salt Creek. Shell and fire-broken rock? were observed eroding from a dark stain in the cut bank 2 m below the terrace surface. Due to the depth of the stream and the steepness of the river bank, surveyors were unable to reach the site. Consequently, whether the site contains cultural deposits has not been determined. Just east of the site is the junction of Salt Creek with an intermittent spring. The elevation is 1020 feet.
Cultural Materials	Unknown
Considerations and Recommendations	The cultural status of this locality must be evaluated. Then, in turn, its eligibility for nomination to the National Register of Historic Places can be assessed.

SUMMARY

Forty-four archaeological sites were investigated during the 1978 survey of Shidler Lake. An additional 25 find spots and loci of potential paleoecological interest were located and described. Five prehistoric sites were tested for buried deposits, and one of these, 340S444, is considered eligible for nomination to the National Register of Historic Places.

In terms of study area culture history, site components range from historic Euroamerican and Osage (n = 10) through Plains Village (n = 2) and undifferentiated Late Archaic/Plains Woodland (n = 3). Most of the components that were surface collected or tested lacked diagnostic artifacts, and are simply identified as "unknown prehistoric" (Table 1). These data do not represent a significant departure from the findings of the 1978 survey of lower Salt Creek valley by the University of Oklahoma (Vehik et al. 1979).

In terms of site function, the historic components include rural pioneer homesteads, mansions, country clubs, and trash dumps, while the prehistoric components include mainly lithic scatters and workshops (n = 26) and small habitation camps (n = 11). Most of the prehistoric sites are small open camps with little contextual integrity. The Salt Creek valley differs from the sandstone valleys of the Cross Timbers to the east in the scarcity of rock shelters. The only rock shelter located during the 1980 survey, 340S438, had extremely shallow cultural deposits, and is less promising than the culturally stratified alluvial site at 340S444 for establishing either a local cultural chronology or a paleoenvironmental sequence.

Table 1. Summary data for sites located or re-examined in 1980.

Survey No.	Site No.	Site Type	Cultural Components	National Register Eligibility
1	340S438	Habitation	Unknown prehistoric	No
2	340S439	Lithic scatter	Unknown prehistoric	No
5	340S440	Homestead, find	Historic, unknown prehistoric	No
7	340S441	Lithic scatter	Unknown prehistoric	No
10	340S442	Lithic scatter	Unknown prehistoric	No
11	340S443	Lithic scatter	Unknown prehistoric	No
17	340S444	Multicomponent	Unknown prehistoric	Yes
19	340S445	Multicomponent	Late Archaic/Middle Woodland	No
20	340S446	Lithic scatter	Unknown prehistoric	No
22	340S447	Lithic scatter	Unknown prehistoric	No
23	340S448	Lithic scatter	Plains Village	No
24	340S449	Lithic scatter	Unknown prehistoric	No
25	340S450	Lithic scatter	Unknown prehistoric	No
27	340S451	Lithic scatter	Unknown prehistoric	No
28	340S452	Trash dump	Historic	No
29	340S453	Lithic scatter, trash dump	Unknown prehistoric, historic	No
31	340S454		"	No
32	340S455	Habitation	Plains Village	No
33	340S456	Lithic scatter	Unknown prehistoric	No
39	340S457	Homestead/lithic scatter	Historic, unknown prehistoric	No
41	340S458	Multicomponent	Late Archaic/Middle Woodland	No
42	340S459	Multicomponent	Unknown prehistoric	No
43	340S463	Lithic scatter	Unknown prehistoric	No
47	340S460	Lithic scatter	Unknown prehistoric	No
49	340S461	Lithic scatter	Unknown prehistoric	No
50	340S462	Lithic scatter	Unknown prehistoric	No
51	340S463	" , cellar	Unknown prehistoric, historic	No
52	340S142	" , house	Unknown prehistoric, historic	No
53	340S464	Lithic scatter	Unknown prehistoric	No
56	340S465	Lithic quarry	Unknown prehistoric	No
58	340S146	Workshop, camp	Unknown prehistoric	No
60	340S469	Quarry, workshop	Unknown prehistoric	No
61	340S466	House and grounds	Historic (1920s)	No
63	340S467	Lithic scatter	Unknown prehistoric	No
64	340S468	Country club	Historic (1920s)	No
	340S424	Habitation	Unknown prehistoric, historic	No
	340S145	Workshop	Unknown prehistoric	No
	340S146	Habitation	Unknown prehistoric	No
	340S469	Workshop	Unknown prehistoric	No
	340S470	Habitation	Late Archaic/Middle Woodland	No
	340S457	Workshop	Unknown prehistoric	No
	340S142	Workshop, house	Unknown prehistoric, historic	No
	340S143	Habitation	Unknown prehistoric	No
	340S144	Habitation, workshop	Unknown prehistoric	No

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APPENDIX I:

SHIDLER LAKE SOILS AND GEOMORPHOLOGY

by

Joe Alan Artz

This appendix discusses general soils-geomorphic relationships in the Shidler Lake area, including implications for local paleohydrology. It also sketches potential linkages between the local paleoenvironmental record and sequences developed for the Copan Lake area to the east, and the Eldorado Lake area to the north. However, it does not represent a detailed geomorphic study of the upper Salt Creek area. The field observations reported here are based on two trips to the project area by the author and principal investigator in August and October, 1981, and represent a total of about eight hours in the field.

General physiography.

The Salt Creek drainage lies within the northern limestone cuesta plains (Curtis and Ham 1972), a geomorphic province delimited by the outcrop of limestones and shales of the Gearyan Stage of the Upper Pennsylvanian Series (Bellis and Rowland 1976: Panel 1). Erosion of these rocks, which underlie the western third of Osage County, has created a topography of gently rolling hills, in contrast to the more steeply dissected relief of the sandstone hills of the eastern third of the county. The northern limestone cuesta plain is, in part, a southern extension of the Flint Hills upland of eastern Kansas. The Gearyan Stage limestones thin southward from Kansas into Oklahoma, as shales thicken and sandstones appear (Lutz-Garihan and Cuffey 1976). Because the limestones in the Oklahoma portions of the Gearyan outcrop tend to be thinner and are thus less resistant to erosion than those to the north in Kansas, the northern limestone cuesta plains lack the rugged relief considered characteristic of the Flint Hills upland in Kansas (Schoewe 1949:286).

In both Kansas and Oklahoma, tallgrass prairie dominates the uplands (Kuchler 1974, Duck and Fletcher 1943). At present trees are restricted to

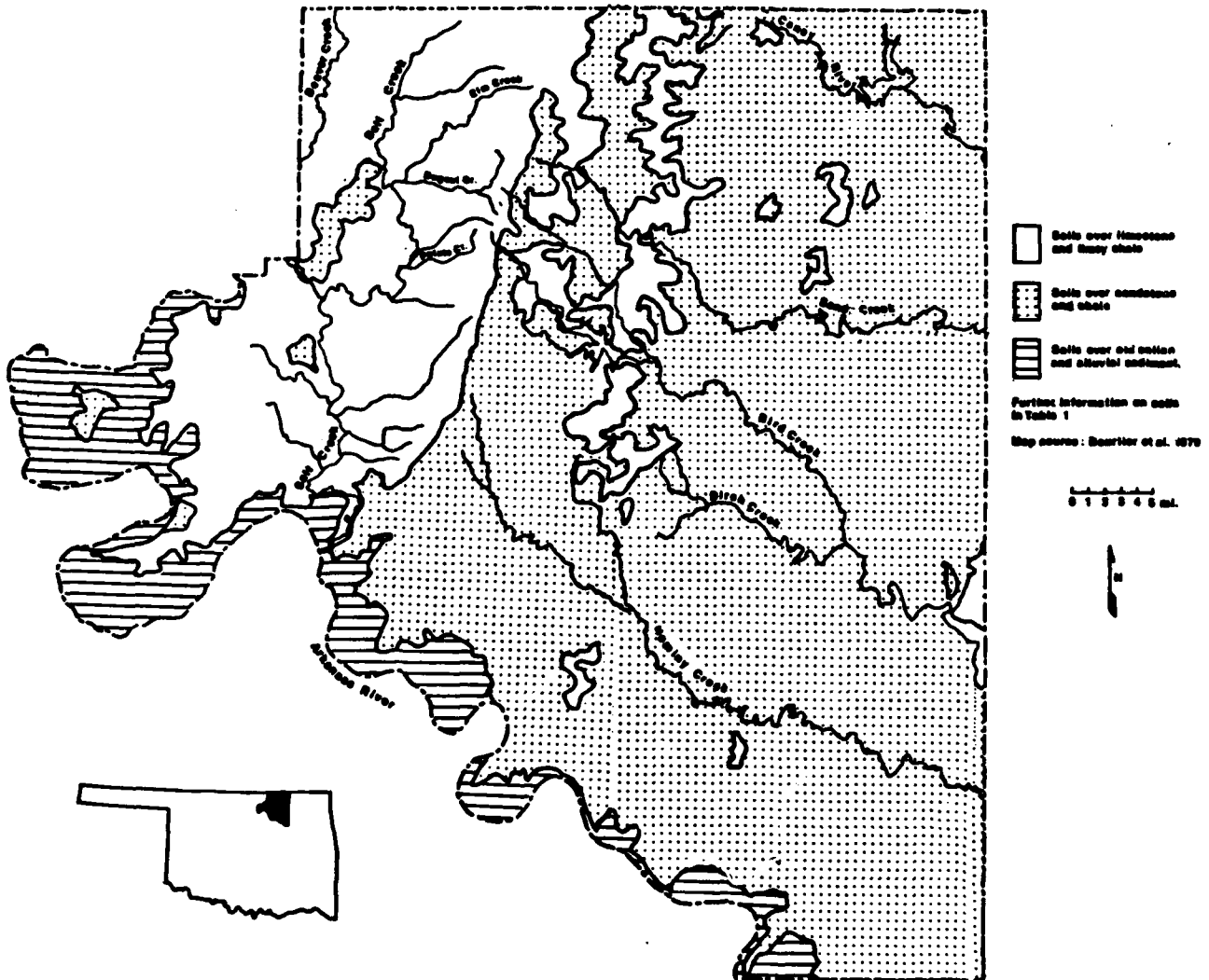


Figure A.1
Distribution of major soil units in Osage County.

gallery forests fringing the stream channels and to occasional scarp woodlands (Barker 1969). Edaphic restrictions, imposed by the clayey soils developed in limestone, may exclude trees from the uplands (Kollmorgen and Simonette 1968). It is doubtful that the uplands of the Salt Creek drainage have ever been forested.

As shown in Figure A.1, the eastern divide of Salt Creek drainage coincides with a major edaphic boundary, separating soils developed over limestone and limey shale in the west from soils developed in sandstone and shale in the east. Figure A.1 is based on the general soils map of Osage County (Bourlier et al. 1979).

Local physiography.

Upper Salt Creek in the Shidler Lake area has four major tributaries, all of which enter Salt Creek from the east. These are Potato, Wamsley, Elm, and Antelope creeks. Dugout Creek is a named tributary of Elm Creek. The three larger creeks, Salt, Elm, and Antelope, exhibit alternating deep pools and stoney riffles. This pattern reflects a bedrock constraint, since limestone frequently outcrops at riffles, which are located on the downstream ends of the pools.

The dominant floodplain soil of the upper Salt Creek drainage is the Wynona series, described as a somewhat poorly drained and slowly permeable soil occurring on concave floodplains (Bourlier et al. 1979:64-65). Wynona soils possess a 20 cm, very dark gray (10YR3/1) A horizon with granular structure, overlying a gleyed B horizon which ranges in color from dark gray (10YR4/1) to black (10YR2/1) and is heavily mottled. The gleyed condition of the B horizon suggests waterlogging, possibly reflecting the shallow depth of the valley fill along Salt Creek.

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ARCHAEOLOGICAL SURVEY OF THE UPPER SALT CREEK BASIN
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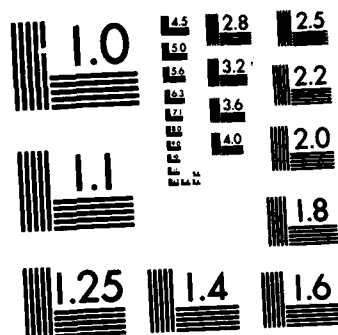


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Although the valley floor is in most places relatively flat, the terrain is interrupted in the vicinity of the riffles by hummocks. These features are elliptical in plan form, with their long axes directed up-valley. They range from 2-4 m in height and from 10-30 m in length, are densely covered by grass, weeds, and trees, and appear to be fairly stable elements of the landscape. Hummocks near the stream channel are frequently eroded, exposing vertical sections composed largely of chert gravel and limestone rubble, interspersed with layers of silty sediment.

Buried soils are sometimes observed within the hummocks, as at a cutbank exposure near archaeological site 340S444 on Elm Creek (Figure A.2). The surface soil in this exposure exhibits a 30 cm A horizon overlying a 45 cm-thick cambic B horizon. The A horizon of the buried soil is 65 cm thick, and overlies an alternating sequence of chert gravels and fine grained sediments. Gravels do not occur in the upper soil or in the buried A horizon. Two samples of charcoal were retrieved for dating purposes, one from just above the top of the buried A horizon, and the other from an inter-gravel mud layer. Their positions within the profile are shown in Figure A.2. They have not been submitted for dating, pending the availability of funds.

The hummocks probably represent large gravel bars deposited by the streams during large floods. The stream flow which characterizes upper Salt Creek and its tributaries during most of the year is not competent to move the gravel which comprises the basal sediment of the hummocks. It is probable that the hummocks are created by exceptionally large floods, occurring at intervals of greater than at least 50 years. A flood of this magnitude in the upper Walnut River in the southern Flint Hills of Kansas

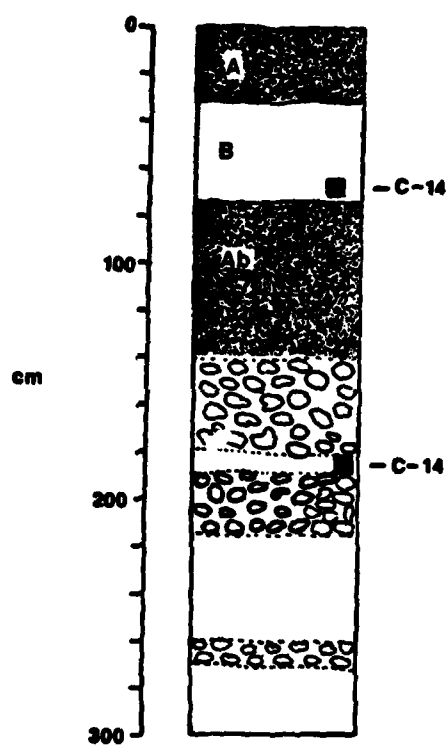


Figure A.2
Profile of buried soils at 340S444.

is known to have transported large quantities of chert and limestone rubble, changing the pattern of pre-flood gravel bars, and on the southern plains floods have been invoked to account for gravel deposits in the Pecos River of west Texas (Patton and Dibble 1982), where such floods are suggested to correlate with relatively arid climatic phases.

During such phases rainfall is concentrated in brief, intense storms which generate infrequent but large-magnitude floods. With a return to moister climate, floods tend to moderate, transporting suspended fine-grained sediment, but little or no gravel. Vegetation is established on the stabilized bars, which acts to trap fine-grained sediment suspended in floodwater. Under these conditions, soil formation is initiated. Patton and Dibble suggest that "these humid-arid channel transformations may be represented by buried soils of the humid intervals separating flood gravel deposits of the arid phases" (1982:117).

Given this interpretation, it is tentatively suggested that the buried soil overlying the gravel deposits profiled in Figure was formed during a "moist" episode, following an "arid" interval in which the gravels were deposited. The silty layers separating gravel bars may represent lower magnitude flood events occurring in intervals between higher magnitude floods. They do not necessarily indicate climatic ameliorations, since they represent deposits of fine-grained sediments rather than soils.

Correlations.

It is tempting to suggest a correlation of the buried soil described above with other, similar soils in northeastern Oklahoma and south-central Kansas. The Copan Paleosol, identified in the Little Caney basin in

Washington County, Oklahoma, formed between A.D. 1 - 700/900 (Hall 1977a, Artz 1982). The Copan Paleosol is recognized as a thick, slowly aggrading floodplain soil. A similar soil, with similar temporal placement, has been recognized on Candy Creek (Saunders 1980), Bird Creek (Hall 1977b), and Hominy Creek (Henry 1980) in the Cross Timbers of eastern Osage County.

To the north, in the Walnut River valley of Butler County, Kansas, the Snyder Soil has been identified (Artz 1980). This paleosol is similar to the Copan Paleosol in morphology and geomorphic context, but was formed prior to the Copan Paleosol, sometime between ca. 2000 B.C. and A.D. 1. The reason for the disparity in dates between the Snyder and Copan paleosols has not been resolved, though it has been suggested that hydrological and climatic differences between the two regions may account for differences in the soils. At any rate, because of this disparity, it is not possible at present to correlate the buried Shidler soils with sequences established to the north and east. The dating of Shidler soil formation intervals would contribute significantly to these regional problems.

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APPENDIX 2:

Location Data for Isolated Finds and Noncultural Localities of Interest

<u>Find Number</u>	<u>Legal Description</u>	<u>USGS Quad Map</u>
Shidler 3*	SE $\frac{1}{4}$ of SE $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 10 T27N R6E	Grainola 7.5
Shidler 4	NE $\frac{1}{4}$ of NE $\frac{1}{4}$ of NW $\frac{1}{4}$ Section 4 T27N R6E	Grainola 7.5
Shidler 6	SE $\frac{1}{4}$ of NW $\frac{1}{4}$ of NW $\frac{1}{4}$ Section 28 T28N R6E	Grainola 7.5
Shidler 8	SW $\frac{1}{4}$ of SE $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 21 T28N R6E	
Shidler 9*		
Shidler 12	NW $\frac{1}{4}$ of SW $\frac{1}{4}$ of NW $\frac{1}{4}$ Section 2 T27N R6E	Shidler 7.5
Shidler 13**	SE $\frac{1}{4}$ of SE $\frac{1}{2}$ of NE $\frac{1}{4}$ Section 3 T27N R6E	Shidler 7.5
Shidler 14	SE $\frac{1}{4}$ of SE $\frac{1}{4}$ of NE $\frac{1}{4}$ Section 3 T27N R6E	Shidler 7.5
Shidler 18		
Shidler 21**	NW $\frac{1}{4}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 3 T27N R6E	Shidler 7.5
Shidler 26	NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of NE $\frac{1}{4}$ Section 3 T27N R6E	Shidler 7.5
Shidler 30	SE $\frac{1}{4}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 3 T27N R6E	Shidler 7.5
Shidler 34	SW $\frac{1}{4}$ of NE $\frac{1}{4}$ of SE $\frac{1}{4}$ Section 10 T27N R6E	Shidler 7.5
Shidler 35*	NE $\frac{1}{4}$ of SE $\frac{1}{4}$ of SE $\frac{1}{4}$ Section 10 T27N R6E	Shidler 7.5
Shidler 36	SW $\frac{1}{4}$ of SE $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 3 T27N R6E	Shidler 7.5
Shidler 38		
Shidler 44	NW $\frac{1}{4}$ of NE $\frac{1}{4}$ of NW $\frac{1}{4}$ Section 23 T27N R6E	Shidler 7.5
Shidler 45	NW $\frac{1}{4}$ of NE $\frac{1}{4}$ of SE $\frac{1}{4}$ Section 25 T27N R6E	Foraker South 7.5
Shidler 48	NE $\frac{1}{4}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 15 T27N R6E	Shidler 7.5
Shidler 54	NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of NE $\frac{1}{4}$ Section 23 T27N R6E	Foraker South 7.5
Shidler 55	NW $\frac{1}{4}$ of NW $\frac{1}{4}$ of NE $\frac{1}{4}$ Section 25 T27N R6E	Foraker South 7.5
Shidler 57	NE $\frac{1}{4}$ of SE $\frac{1}{4}$ of SE $\frac{1}{4}$ Section 23 T27N R6E	Foraker South 7.5

* noncultural locality

** isolated bone find

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